MADALGO
CENTER FOR MASSIVE DATA ALGORITHMICS

AARHUS UNIVERSITY

Danmarks Grundforskningsfond
Danish National Research Foundation

ANNUAL REPORT 2015

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2015 Highlights

Research team

At the end of 2015 the center research team consisted of eight senior researchers (4 at AU), five Postdocs (all at AU) and thirteen PhD students (6 at AU).

Additionally, two further Postdocs and seven PhD students (six of which obtained PhD degrees during the year) were part of the center in 2015. Almost all center Postdocs are internationals and so are all but two of the PhD students.

Research collaboration and results

In 2015 MADALGO researchers published 69 peer reviewed research papers within the center research areas. Several of these papers have appeared in highly ranked journals and conference proceedings. Some of the results in the papers have been obtained with the many international researchers that visited MADALGO in 2015. The center also has extensive multidisci-plinary and industry collaboration.

Many techniques are known for proving how much space is needed to solve a given streaming problem (space lower bounds). However, the situation is much more disappointing when it comes to understanding how fast stream data items can be processed (time lower bounds). In fact, until recently no time lower bounds were known for any streaming problem.

In 2015 center researchers described a general method for translating strea-ming space lower bounds into time lower bounds. This allowed for immedi-ate reuse of a decade of research in streaming space lower bounds to obtain time lower bounds for many fundamental streaming problems.

Center Events

Apart from a large number of smaller research seminars and workshops, as well as a retreat for center employees, MADALGO organized a four day international summer school on “Streaming Algorithms” in 2015, where four international experts lectured for 76 participants (mostly PhD students) from 38 institutions and 3 companies in 17 countries. The center also organized the Sixth Workshop on Massive Data Algorithmics (MASSIVE 2015) as part of the main European algorithms event ALGO in Patras, Greece.

In 2015 center researchers gave numerous presentations at international research conferences, as well as more than 30 invited presentations at research conferences, workshops and seminars. Center researchers have also participated in several public outreach activities, including as lecturer at the people’s university (“Folkeuniversitetet”).

Awards and acknowledgments

Center researchers received a number of awards and acknowledgments in 2015 including the following:

Center senior researcher Mehlhorn was elected Foreign Associate of the US National Academy of Sciences, Indyk was Elected Fellow of the Association for Computing Machinery (ACM), and Afshani was promoted to Associated Professor with Tenure. Center Director Arge was knighted by the Queen of Denmark.
Center PhD students Rav and Eenberg won the AU Computer Science Teaching Assistant of the year and Computer Science Student of the Year Award, respectively.

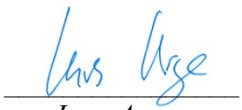
Content

This report describes the 2015 activities at the Danish National Research Foundation's *Center for Massive Data Algorithmics* (MADALGO). The report is accompanied by a number of appendices (covering external relations, conferences, educational activities, external funding, awards, public outreach, patents and applications, publications, list of personnel) as specified by the foundation. The appendices are an important part of the annual report (and information such as external funding and teaching is only covered in the appendices). Note that *some* of the appendices only cover the employees at Aarhus University (and not the participants at Max Planck Institute for Informatics, Massachusetts Institute of Technology and Frankfurt University). Finally, note that the 2015 accounts for the center with appendices (as well as the center research plan and previous yearly reports) are also important in order to obtain a complete overview of the 2015 activities of the center.

Center director statement

I hereby confirm the correctness of the information concerning 2015 annual accounts, including itemizations, submitted to the foundation. Also, I confirm that the compiled annual reporting, including the appendices, is correct, i.e. it is free of material misstatement or omissions, and that the administration of the center funds has been secure and sound, and in accordance with the conditions of the center agreement.

March 2016



Lars Arge
Center Director

1 Center background and organization

Center for Massive Data Algorithmics (MADALGO) strives to be a world-leading center in algorithms for handling massive data. The center particularly focuses on designing algorithms in theoretical models that take the hierarchical memory organization of modern machines into account. The center builds on the research strength at the main center site at Aarhus University (AU) in Denmark (with Brodal, Arge, Afshani and Larsen as senior faculty), at the center sites at the Max Planck Institute for Informatics (MPI) and at Frankfurt University (FRA) in Germany (with Mehlhorn and Meyer as senior faculty), and at Massachusetts Institute of Technology (MIT) in the US (with Demaine and Indyk as senior faculty). The center also relies on significant international research collaboration, as well as multidisciplinary and industry collaboration. The center is led by center director Lars Arge along with the other senior faculty and with advice from an international advisory board. It is managed by center manager Trine Holmgaard with help from accountant Ellen Lindstrøm and part time student assistant Katrine Ø. Rasmussen.

2 Center recruitment and research education

During 2015 two of the senior researchers at AU was promoted, namely Afshani to Associate Professor and Brodal to Full Professor. Afshani was one of the two faculty hired as planned in the center contract. The other, Assistant Professor Kasper G. Larsen, is expected to be evaluated for promotion to Associate Professor within a year or so. Thus the center is on track to hire faculty as planned.

Also the center Post Doc and PhD student population has developed more or less as anticipated. Post Docs and PhD students are not only important for fulfilling the center's research plan. A key goal of the center is also to train the next generation of researchers in a world-leading and international environment. Thus PhD students and Post Docs are a very important part of the center, and the center strives to have a large number of (especially international) PhD students and Post Docs at AU. Furthermore, it is worth noting that the number of Master students associated with the center has increased significantly (mainly because of the addition of AU faculty); in 2015 no less than 16 students graduated from the center with an MS degree.

Currently, the center houses 4 *Post Docs* (all at AU). Two of these Post Docs were hired in 2015, namely Frank Stalls (PhD Utrecht 2015) who works on computational geometry problems with an emphasis on trajectory data, and Jesper Nielsen (PhD AU 2015) who works on succinct data structures and text algorithms. Note that previously the center has had a policy of not hiring its own PhD students as Post Docs, but in the case of Nielsen it was decided to disregard this policy in order for him to help build up the expertize needed in order to be able to address a broader set of "Big Data" challenges, and thus likely contribute to a successful embedment of the center after the expiration of the Foundation grant. Two Post Docs also left the center in 2015, namely Wanbin Son who took up a position with center for geometry and its applications at POSTECH in South Korea and Zengfeng Huang who left for a position at University of New South Wales.

Currently, the center houses 14 *PhD students* (7 at AU). Three of these students joined the center in 2015 and one in 2016. At AU Yujin Shin with Arge as advisor, as well as Kasper Eenberg and Alexander Mathiasen with Larsen as advisor, and at FRA Manuel Penschuck with Meyer as advisor. No less than six PhD students obtained their degrees in 2015. At AU Jesper Nielsen and Jakob Truelsen with Brodal as advisor, Jungwoo Yang with Arge as advisor, and Bryan Wilkinson with Arge and Afshani as advisors. As mentioned above, Nielsen continued with a Post Doc, whereas the rest went to industry, namely to SCALGO (Truelsen and Yang) and Amazon in Seattle (Wilkinson). Furthermore, as mentioned in last year's report, PhD student Sarfraz Raza left the center without a degree. At FRA Volker Weichert finished with Meyer as advisor, and at MIT Haitham Hassanieh finished with Indyk as advisor. They went on to take up a position at the German Statistical Office and as an Assistant Professor at University of Illinois at Urbana Champaign, respectively.

As also discussed in previous annual reports, we believe the center's *recruitment efforts* have been relatively successful. For example, four of the seven current AU PhD students are recruited internationally, and almost all center Post Docs continue to be internationally recruited. The center's recruitment strategy has been to try to recruit a strong and diverse PhD student and Post Doc population by both focusing on identifying the top AU students, for example through the numerous graduate level classes taught by center faculty and Post Docs, and on recruiting internationally. To recruit the best international candidates the center has advertised its positions broadly and actively solicited candidates from its international network (collaborators and by now extensive network of previous center students and especially Post Docs). However, despite an active effort to hire women, the center has not been able to obtain a reasonable *gender balance*. So far the center has only had one female Post Doc and two female PhD students, including the new PhD student Shin. One reason for this is obviously the general lack of women in computer science. For this reason, the center has participated in various outreach activities, for example in relation to high school students.

The center continues to focus on research education (training of PhD students and Post Docs). This includes exchange of Post Doc and PhD students, organization of summer schools and workshops, and 6 months stay abroad for AU PhD students. For example, PhD students Edvin Berglin and Ingo van Duijn are about to leave for stays in Bergen and Ottawa, respectively. There is also continued emphasis on initiatives designed to create a sense of community at the main center site and among the center sites. This includes a yearly fall retreat, monthly center lunches at AU, movie nights, etc. Recently, there has been an increasing focus in Denmark (and abroad) on *research integrity*. In the center's relatively theoretical research area there is a very collaborative research tradition and authorships are only awarded to major contributors. Thus problems in relation to competing research teams and authorships are likely less of an issue than in many other areas. Still research integrity is obviously also a focus of the center, especially in connection with research education. As discussed in last year's report, research integrity issues are mostly addressed between the individual advisor and the PhD students and Post Docs participating in the individual research project, as well as through a very open and reflective research environment.

3 Center research

The center research plan discusses a number of research challenges in the center focus research areas of *I/O-efficient*, *cache-oblivious* and *streaming* algorithms and in *algorithm engineering*, as well as challenges in a number of *other and crosscutting* areas. Overall, 2015 was a successful year in terms of research results (e.g. with 13 publications in the top conferences *Symposium on Theory of Computing*, *Symposium on the Foundation of Computer Science*, and *Symposium on Discrete Algorithms*). Below we *briefly* discuss *some* of the obtained results. Although progress on the different parts of the research plan varies substantially, we currently see no need to modify the plan.

I/O-efficient algorithms

In the area of I/O-efficient algorithms, that is, algorithms designed in a two-level memory-disk model, we have made good progress on a number of problems in relation to the areas outlined in the research plan.

In terms of *fundamental algorithmic problems*, we have e.g. published results on sorting algorithms that are efficient both in terms of I/O and internal memory computation in the RAM model of computation [J181], and we have recently obtained result on sublinear I/O-efficient algorithms for a number of geometric problems, that is, algorithms that can solve a given problem reading only a fraction of the input from disk (by assuming that the input is given in a specific format).

In terms of *fundamental data structures*, we have published on layout of given tree data structures on disk such that they can be accessed efficiently [J175], and submitted a publication on the number of I/Os needed to perform decrease-key operations on a priority queue. A priority queue is a very fundamental data structure used in many algorithms, and the development of an I/O-efficient decrease-key operation is a longstanding open problem. We have also continued our work on *geometric data structures*, in particular for range searching variants, that is, the problem of storing a set of d-dimensional points such that properties of the points that lie inside a query range can be found efficiently. Thus we have e.g. developed efficient structures for finding the points in the plane within a three-sided query range. These results will be presented at an upcoming conference.

In the area of *terrain data processing*, we have continued our work on problems in relation to modeling of water flow, and published work on I/O-efficient algorithms for mapping depression flood risk after a given rain even or forecast [C398], and we are currently considering similar algorithms for risk after a given sea-level rise event. Previously, we had only considered uniform rain or sea-level rise. We have also published work on estimating the risk of flooding from water rising in rivers [C401]. As mentioned in last year's report, we have also published internal memory results on maintaining various terrain analysis results under updates of a part of the terrain data without having to recompute the analysis on the entire terrain data [C378], and we are working on a publication with similar I/O-efficient results.

We have also continued our work on I/O-efficient *graph algorithms* with a focus on evolving networks. For example, we have published results on I/O-efficient distance oracles for dynamic real-world graphs like the web graph or the Facebook graph [C383]. Unfortunately, such real-world graphs are often not publicly available or limited to fixed sizes. Hence, scientists frequently rely on synthetic graphs and recently we presented I/O-efficient algorithms for producing such graphs, or more precisely, for extending arbitrary seed graphs to huge artificial networks. We have also continued investigating theoretical and practical improvements of our dynamic Breadth-First-Search (BFS) implementation [C283].

Finally, we have also published work on *paging algorithms*, that is, algorithms that perform I/O for algorithms that are not designed with I/O in mind [J173,J182].

Cache-oblivious algorithms
In the cache-oblivious algorithms area the aim is to develop algorithms that automatically adapt to the unknown multiple levels of modern memory hierarchies. Techniques to obtain cache-oblivious algorithms are still not very developed and the fundamental limitations in the area not well understood. Thus the cache-oblivious algorithms areas is somewhat more high-risk than the other focus areas of the center, and unfortunately this means that we have not made as much progress in the area as we would have liked. Thus, in 2015 we only published a cache-oblivious data structure for the iterated predecessor problem, that is, the problem of storing a number of sorted lists such that the largest element smaller than a query value in each list can be found efficiently [C407]. This problem is an important building block in many other algorithms.

Streaming algorithms
Streaming algorithms models applications where only one sequential pass over the data is allowed. The research plan outlines work on fundamental streaming problems and general streaming algorithm techniques.
In 2015 we have published novel algorithms for a number of *fundamental streaming problems*, including finding the smallest ball intersecting a set of disjoint balls [C380]. We also showed the first known lower bounds for the time complexity of basic streaming algorithms [C382].
In terms of *design techniques*, we focused on one of the major techniques for designing streaming algorithm called *linear sketching*. In this setting the goal is to compute a small so-called sketch Ax of a vector x using an appropriately designed sketching matrix A, such that given only the sketch one can still compute the desired property of x. The vector x could for example be a representation of a data stream. A common goal is to compute a *sparse approximation* to x, that is, given Ax, reconstructing an approximation that has as few non-zero coefficients as possible while being as close to x as possible with respect to some metric. Following our prior work in this area, we have designed a collection of efficient algorithms for finding approximations in which the pattern of non-zeros must satisfy given constraints [C388, J185]. Such restrictions model patterns that occur in specific application domain and allow obtaining shorter sketches. We also showed lower bounds for sketching by connecting it to metric embeddings, a notion that has been studied in geometric functional analysis for several decades [C387]. Very recently we have also obtained sketching algorithms for more general metrics. In particular, we have shown improved upper and lower bounds for sketches satisfying the so-called restricted isometry property, a fundamental notion enabling many useful algorithms, under general norms [C385].

Algorithm engineering
Algorithm engineering covers the design and analysis of practical algorithms, their efficient implementation, as well as experimentation that provides insight into their applicability. In 2015 we have made progress in most of the algorithm engineering areas discussed in the research plan.
In terms of *library development*, we continue to update and support the TPIE library for implementation of I/O-efficient algorithms, and we are in the process of finishing a publication on our recent redesign of the library. Similarly, we are also contributing to the alternative STXXL library, and have e.g. investigated improved support for flash-memory disks in the library [T85]. We have also continued our work on engineering I/O-efficient *graphs algorithms*, and have e.g. implemented and experimented with our I/O-efficient distance oracle data structure [C383] and synthetic graph generator discussed above. Ongoing work includes extending various graph traversal algorithms implementations.
In terms of *terrain data processing*, we have e.g. implemented and experimented with our new I/O-efficient algorithms mentioned above for mapping depression flood risk from a given rain event (such as a 100-year event) or forecast, and flood risk from water rising in rivers. Both algorithms perform very well in practice [C398,C401], and thus opens up for real-time combination with forecast data. It has also lead to our work on flooding risk from a given sea-level rise event/forecast, and we are currently implementing the algorithm we have developed for this problem. As discussed in previous annual reports, much of our previous engineering work on massive terrain data processing is being commercialized through the startup company SCALGO. In 2015 SCALGO technology won a "highest growth potential" award in a competition held by the Danish Ministry of the Environment and the Danish municipalities, just as Realdania through their "Klimaspring" campaign awarded SCALGO and the center, along with a number of companies and public authorities, a large grant for further development of a new successful product called SCALGO Live. SCALGO also won several contracts with the Danish Geodata Agency to e.g. help produce sea-charts for Greenland and contours for Denmark. Thus the success of SCALGO continues to be a good example of how basic research can lead to innovative products and services. It also continues to give media coverage to the center. Our work on terrain data processing, and our algorithm engineering work in general, also continue to be a driver

for collaboration and new projects. For example, it is at the core of our continuing multidisciplinary collaboration with *biodiversity* researchers, who e.g. has been significantly involved in our work on river-water rise flood risk [C401]. Another central area of collaboration is evolutionary (phylogenetic) trees [J178], where several joint publications (including on new efficient software packages) are to be presented at upcoming conferences or are in submission.
Finally, the diversity in our algorithm engineering work can also be illustrated by the fact that we have also e.g. worked on detecting interesting features in seismic data [C389], on computing categorical richness of categorical data such as data on soil type or land use [C399], and on analyzing neural interactions [J184].

Other/crosscutting areas
We have continued our work in several other massive dataset areas as discussed in the research plan.
In the area of *space efficient data structures*, we e.g. have presented the first priority queue data structure using minimal space (that is, an implicit data structure) and only moving a constant number of elements in memory for each element inserted or deleted [C373]. All previous solutions moved a non-constant number of elements for one of the update operations. In general, the center continues to have a focus on *data structures* and continues to obtain significant results on structures in classical models of computation. In 2015, we have for example proved several desirable properties of old well-studied binary search tree balancing techniques [C395,C396,C397], as well as developed a priority queue data structure that supports changes in past versions of the queue while making all subsequent operations correct with respect to changes in the past [C406]. Other data structure problems we have considered include similarity search and approximate range emptiness. While all previous approaches for similarity search in high dimensional data have been based on so-called locality sensitive hashing, we developed more efficient structures based on completely different techniques, after lower bounds were proven showing that faster solutions are impossible using hashing-based approaches [C384]. Thus this work is a good example of how proving lower bounds can lead to new ideas that results in improved structures. Many of our 2015 data structure results have included *lower bounds*, including our work on approximate range emptiness, where the problem is to maintain one-dimensional points and support reporting all points inside a query interval while allowing false positives, i.e. reporting of points that are not actually in the dataset. The idea behind allowing false positives is that it may allow for the design of small-space structures and the approximate range emptiness problem is e.g. natural in web caching. We introduced the problem and presented a data structure for it along with lower bounds establishing its optimality [C381]. We have a number of other publications on range searching problems in preparation.
We did not make much progress on *faulty-memory* and *flash memory algorithms* in 2015, although the efficient use of flash memory has proved increasingly important in our algorithm engineering work (for example in our distance oracle work [C383]). We are also still working on several model-theoretic aspects of flash memory, for example in our work on alpha-paging [J173] and in work on efficient distribution-based algorithms still to be published. Similarly, we also continue to work on algorithms that are efficient in the practically realistic *internal memory RAM-model* of computation in both our I/O and data structure work (e.g. [J181] and [C381]]). We have also continued our work on massive data problems in several *parallel and distributed models* of computation. For example, we have obtained results on algorithms for massively parallel *graphics processing units (GPUs*) for a diverse set of problems, including fundamental sorting and permuting problems [C402] and evaluation of financial options [T73]. We also recently presented results on a special kind of semi-sorting with important applications in shortest path algorithms, just as we are working on a publication on efficient comparison-based sorting. We have also obtained several results on *distributed algorithms*, including on lower bounds for the communication complexity of distributed graph algorithms (approximate maximum matchings, maximum flows and graph sparsification) [C372]. We also presented a distributed algorithm for the classical problem of graph coloring [C376], which establishes a separation between the distributed complexity of the edge-coloring and maximal matching problems.
Finally note that, as discussed in previous year's reports, much of our work described above is "crosscutting" in the sense that it involves ideas from or spans several areas (models) or combines the various models/methodologies we consider. Such new areas continually appear (and are considered) in the center and are often driven by the interests of (new) Post Docs. For example, we have recently obtained result on allocation of hierarchical memory to parallel processes using game-theoretic tools [C394], and we have also recently considered problems in relation to grouping of trajectory data, that is, identification of moving entities (like animals) that travel together during sufficiently long time, as well as identification of representative trajectories for a group of entities. A number of publications on this subject are in preparation.

4 Collaboration

The center continues to try to maintain a vibrant and international environment at the main center site at AU, e.g. through emphasis on hosting international visitors. Several FRA and MIT center participants visited AU during 2015. Additionally, a large number of non-center faculty and students visited the center. PhD students Andrea Farruggina (Pisa) and Yannik Stein (FU Berlin) visited for longer periods, and the list of shorter term visitors include Takeshi Tokuyama (Tohoko), Naoki Katoh (Kyoto), Moshe Lewenstein (Bar Ilan), Raphael Clifford (Bristol), Karl Bringmann (ETH Zurich), Tsvi Kopelowitz (Michigan), Jelani Nelson (Harvard), Alexandr Andoni (Columbia), Michael Kapralov (MIT), David Woodruff (IBM), Siu-Wing Cheng (HKUST), Mikkel Thorup (Copenhagen), Mordecai Golin (HKUST), Johannes Fischer (Karlsruhe), John Iacono (NYU), Jiwon Park (KAIST), Sangduk Yoon (POSTECH), Mingyu Kim (POSTECH), Donghyuk Kim (KAIST), Nodari Sitchinava (Hawaii) and Riko Jakob (ITU). The center continues to collaborate extensively with researchers from a large number of institutions and new collaborations are continually being explored. For example, with two joint workshops (at the center and in Korea) senior faculty Afshani has recently kicked off a collaboration with discrete geometry researchers at Korea Advanced Institute of Science and Technology supported by a network grant from the Danish Agency for Science, Technology and Innovation. The center also continues to try to be a catalyst of multidisciplinary and industry collaboration. Many of the center's activities in this direction are in connection with massive terrain data. As described above, the collaboration with biodiversity researchers evolves around terrain data (and Biology and Computer Science Post Docs continue to try to spend at least one day a week at the other site than their base), and so does the longtime collaboration with industry partners such as COWI and center startup SCALGO, as well as the new collaboration with a large number of companies (including NIRAS and the Alexandra Institute) and public authorities (including e.g. DMI, Odense Kommune, and Aarhus Vand) in the "Klimaspring" project. However, the center also has collaborations on other subjects, such as with Insero software on flight data management in connection with the industrial Post Doc Allan Jørgensen funded by Innovation Fond Denmark. Center director Arge is also centrally involved in a large four year societal challenges "Big Data" project funded partly by Innovation Fond Denmark and with a total budget of well over 100M Kr. The project "Danish Center for Big Data Analytics Driven Innovation (DABAI)" is led by the Alexandra Institute and computer science faculty at AU, University of Copenhagen and the Technical University of Denmark, and also includes a large number of companies (e.g. Systematic, Visma and BusinessMinds) and governmental authorities (e.g. Danish Business Authority, Danish Agency for Digitization, and the Central Jutland Region). We believe the success of the center played a crucial role in securing funding for this project. Furthermore, the center continues to explore further multidisciplinary and industry collaborations within "Big Data" as part of an effort to secure a successful embedment of the center after expiration of the Foundation grant. These efforts also include an increased focus on machine learning techniques, with faculty Larsen and Post Docs Jørgensen and Nielsen particularly focusing on this area.

5 Events

During 2015 the center participated in and/or organized a large number of research events. These included internal weekly seminars at AU and a retreat for center employees. Externally, center researchers gave numerous presentations at international research conferences, as well as more than 30 invited presentations at research conferences, workshops and seminars. Center researchers have also participated in several public outreach activities. For example, center PhD students have lectured for female high-school student, and Arge has given several lectures for general audiences, for example at the people's university and most recently for several thousand people in the public lectures in natural sciences series. Center PhD students also coached AU student programming competition teams competing in the Northwestern European Regional Contest. Following previous year's successes, the center also organized a seventh *Workshop on Massive Data Algorithmics* (MASSIVE) in 2015, co-located with the premiere broad European algorithms conference ALGO (this year Greece). The eights in the series will be held during ALGO 2016, which is organized by the center in Aarhus. The center also continued its series of summer schools with a school on Streaming Algorithms. At the school, four international experts from Colombia and Harvard University, as well as from IBM T.J. Watson and IBM Almaden research centers, lectured for 76 participants from 38 institutions and 3 companies in 17 countries. Center researchers were also involved in the organization of a number of other international events, and senior center faculty were program committee chairs of no less than three conferences, namely the top conferences *Symposium on Computational Geometry* (Arge) and *Symposium on Discrete Algorithms* (Indyk), as well as the minor *International Conference on Fun with Algorithms* (Demaine).

EXTERNAL RELATIONS **SECTION A**

List **includes** relevant collaboration for AU as well as MIT, MPI and FRA researchers in 2015

Collaborator Name (person and/or institution), Country	Collaboration subject	Output of collaboration	Collaboration with: (Please check the appropriate box)			
			Danish universities, research groups and institutions	Foreign universities, research groups and institutions	Danish companies	Foreign companies
SCALGO, Denmark	I/O-efficient terrain algorithms	Algorithms and software			X	
COWI, Denmark	Terrain processing and flood risk screening	Terrain processing algorithms and software			X	
EIVA, Denmark	Sonar data processing	Software			X	
SCALGO, Alien Workshop, COWI, NIRAS, Silkeborg Kommune, Odense Kommune, Aarhus Vand, Vandcenter Syd, DMI and Alexandra Instituttet, Denmark	Flood risk analysis - Realdania Klimaspring project	Algorithms and software			X	
Alexandra Institute, University of Copenhagen, Technical University of Denmark, Systematic, Visma and BusinessMinds, Danish Business Authority, Danish Agency for Digitization, and the Central Jutland Region, Denmark	Danish Center for Big Data Analytics Driven Innovation - Innovation Fond Denmark project		X		X	
Insero software, Denmark	Flight data management	Algorithms and software			X	
Pankaj K. Agarwal (Duke), USA	Terrain algorithms	Publications		X		
Mikkel Thorup (Copenhagen), Denmark	I/O-efficient RAM algorithms	Publication	X			
Group of Jens-Christian Svenning (Aarhus), Denmark	Terrain analysis and biodiversity	Publications	X			

Christos Tsirogiannis (Glasgow), Scotland, UK	Algorithms for Social Network Analysis	Publication		X		
Mark de Berg (TU Eindhoven), Netherlands	Efficient Algorithms on Raster Data Sets	Publication and Software		X		
Cici Alexander (Dynamiques de l'Environnement Côtier IFREMER), France	Algorithms and Software for Flood Modelling	Publication and Software		X		
Marc van Kreveld and Lionov Wiratma (Utrecht), The Netherlands	Geometric algorithms and data structures	Publication		X		
Maarten Löffler (Utrecht), Bettina Speckmann and Arthur van Goethem (TU Eindhoven), The Netherlands	Geometric algorithms and data structures, Visualization	Publication		X		
Erin Chambers (Saint Louis), USA	Geometric algorithms			X		
Valentin Polishchuk (Linköping), Sweden	Geometric algorithms	Publication		X		
Jerome Urhausen (TU Karlsruhe), Germany	Geometric algorithms	Publication		X		
Rodrigo I. Silveira, Vera Sacristan (Polytechnic University of Catalonia), Spain, Maike Buchin (Ruhr University Bochum) Germany, Kevin Buchin (TU Eindhoven), The Netherlands, and Carola Wenk (Tulane) and Brittany Fasy (Montana State), USA	Geometric algorithms	Publication		X		
Martin Nöllenburg (TU Wien), Austria	Geometric algorithms	Publication		X		

Andy Brodnik (Ljubljana), Slovenia	Data structures	Publication		X		
Riko Jacob (ITU), Denmark	Computational geometry	Publication	X			
Robert Tarjan (Princeton), USA, and George Lagogiannis (Athens), Greece	Priority queues	Publication		X		
Joshua Brody (Swarthmore), USA	Data structure lower bounds	Publication		X		
Mayank Goswami (Max-Planck), Germany and Rasmus Pagh (ITU), Denmark	Data structure lower bounds	Publication	X	X		
Jelani Nelson (Harvard) and Huy L. Nguyen (Toyota Techonological Institute at Chicago), USA	Streaming lower bounds	Publication		X		X
Raphaël Clifford (Bristol), UK	Data Structure Lower Bounds	Publication		X		
Group of Ottfried Cheong (Korea Advanced Institute of Science and Technology), Korea	Discrete geometry	Publications		X		
Donald R. Sheehy (Connecticut), USA	Computational geometry	Publication		x		
Yannik Stien (FU Berlin), Germany	Computational geometry	Publication		X		
Nodari Sithcinava (Hawaii), USA	GPU Algorithms	Publication		X		
Zhewei Wei (Renmin), China	Range searching	Publication		X		
German Priority Program Algorithms for Big Data, Germany	Parallel-external algorithms	Workshops		X		
Group of Peter Sanders (Karlsruhe), Germany	Libraries for parallel/external computation and energy-efficient sorting	Software		X		

Group of Henning Meyerhenke (Karlsruhe), Germany	Algorithms for betweenness centrality	Software		X		
Norbert Zehl (Dalhousie), Canada	I/O-efficient algorithms	Publications		X		
Deepak Ajwani (Bell Labs), Ireland	Distance oracles	Publication				X
John Owens (UC Davis), USA	GPU Algorithms	Publication		X		
Michael Wibral (Brain Imaging Center, Goethe University), Germany	Applications of graph algorithms in neuro science	Publication		X		
Jonathan Kane, Ligang Lu and Detlef Hohl, Xingang Ch (Shell), USA	Seismic imaging	Publication				X
Alexandr Andoni (Columbia), USA	Sketching, locality sensitive hashing	Publication		X		
Robert Krauthgamer (Weizmann), Israel	Sketching, Locality Sensitive Hashing	Publication		X		
Thijs Laarhoven (Eindhoven), Netherlands	Locality sensitive hashing	Publication		X		
Mahdi Cheraghchi (Imperial College), UK	Sparse Fourier Transform	Publication		X		
Matthew J. Patitz and Robert T. Schweller (Texas), Trent A. Rogers (Arkansas), Scott M. Summers (Wisconsin) and Damien Woods (Caltech), USA	Tile assembly	Publication		X		
Greg Aloupis (McGill), Canada, Alan Guo (MIT), USA, and Giovanni Viglietta (Pisa), Italy	Game complexity	Publication		X		

Katsuhisa Yamanaka (Iwate), Akira Suzuki, Kei Uchizawa and Takehiro Ito (Tohoku), Jun Kawahara (Nara Inst. Science & Technology), Masashi Kiyomi (JAIST), Yoshio Okamoto (University of Electro-Communications), Toshiki Saitoh (Kobe) and Takeaki Uno (National Institute of Informatics), Japan	Graph algorithms	Publication		X		
Aaron B. Adcock (Stanford), Michael P. O'Brien, Felix Reidl and Blair D. Sullivan (NC State), USA, and Fernando Sanchez Villaamil (Aachen), Germany	Game complexity	Publication		X		
John Iacono (NYU), USA, and Stefan Langerman (Bruxelles), Belgium	Extermal memory data structures	Publication		X		
Group of Sandor Fekete (TU Braunschweig), Germany	Self-Assembly	Publication		X		
Tim Kaler, Quanquan Liu and Adam Yedidia (MIT) and Aaron Sidford (Microsoft Research), USA	Priority queues	Publication		X		

Greg Aloupis (McGill), Bahram Kouhestani (Queens) and David Bremner (New Brunswick), Canada, Joseph Mitchell and Esther Arkin (Stony Brook), USA, Sandor Fekete (TU Braunschweig), Germany	Computational geometry	Publication		X		
Aaron Becker, Hamed Mohtasham Shad and Rose Morris-Wright (Houston), USA, and Sandor Fekete (TU Braunschweig), Germany	Robot swarm control	Publication		X		
David Eppstein (UC Irvine), Adam Hesterberg (MIT), USA, Anna Lubiw (Waterloo), Canada, and Hiro Ito (Kyoto), Ryuhei Uehara (JAIST) and Yushi Uno (Osaka), Japan	Folding	Publication		X		
Seung Man Oh and Godfried Toussaint (NYU), USA	Origami crease patterns	Publication		X		
Eli Fox-Epstein (Brown), USA, Duc A. Hoang,Yota Otachi, Ryuhei Uehara and Takeshi Yamada (JAIST), Takehiro Ito (Tohoku) and Hirotaka Ono (Kyushu), Japan	Tree algorithms	Publication		X		

Fedor Fomin (Bergen), Norway, MohammadTaghi Hajiaghayi (Maryland), USA, and Dimitrios Thilikos (Politecnica de Catalunya), Spain	Bidimensionality	Book chapter		X		
Helge Bruelheide and Oliver Purschke (Centre for Integrative Biodiversity Research), Germany	Global vegetation database	Database		X		
Miguel Mahecha (Max-Planck), Germany	Remote sensing for biodiversity monitoring	EU project		X		
Brian Enquist (Arizona), USA	Botanical information and ecology network	Publications and database		X		
Loic Pellisier (ETH Zurich), Switzerland	Phylogenetic diversity patterns	Publications		X		
Maria Vorontsova (Royal Botanic Gardens), UK	Grass distributions	Publications		X		

CONFERENCES **SECTION B**

List **includes** 2015 information for AU, as well as MIT, MPI and FRA researchers.
Only invited (and e.g. not conference contributed) talks are listed.

a) Organisation of international conferences, symposia, seminars etc.(*)

Title of event
Workshop on Massive Data Algorithmics (MASSIVE)
MADALGO Summer School on Streaming Algorithms
Research course on New Developments in Approximation Algorithms (ADFOCS)
STOC 15 tutorial: Hardness and Equivalences in P
Bellairs Winter Workshop on Computational Geometry
MADALGO-KAIST Workshop on Discrete Geometry

b) Number of Invited Talks

Title of event	Venue	Name(s) of participant(s)
Dutch Data Science Summit plenary lecture	Eindhoven, the Netherlands	Arge
Danish Society of Engineers, EVA committee conference, invited talk	Nyborg, Denmark	Arge
Keynote at NNmarkedsdata Data Intellegence Conference	Aarhus, Denmark	Arge
Keynote at GIS Innovation Forum Conference	Mekka, Saudi Arabia	Arge
Ecological Society of America invited talk	Baltimore, USA	Sandel
Institute for programming research and algorithmics fall days invited talk	Roermond, The Netherlands	Staals
Colloquium	University of Southern Denmark, Denmark	Brodal
Workshop on Computational Complexity of Low-Polynomial Time Problems invited talk	Simon's Institute at Berkeley, USA	Larsen
Colloquium	Copenhagen University, Denmark	Larsen
IPM Combinatorics and Computing Conference invited talk	Institute for Research in Fundamental Sciences, Iran	Afshani
Indo-German Workshop on Algorithms Invited talk	Indian Statistical Institute, India	Meyer
EuroCG Plenary talk	Ljubljana, Slovenia	Mehlhorn
Colloquium	Duke University, USA	Indyk
Frontiers in Computing and Data Science invited talk	Michigan State University, USA	Indyk
Fall Workshop on Computational Geometry keynote	Buffalo, USA	Indyk
Workshop on Algorithmic Challenges in Machine Learning invited talk	UC San Diego, USA	Indyk
Fast Algorithms for Structured Sparsity invited talk	Conference on Big Data, Harvard	Indyk
Conference on Big Data invited talk	Harvard University, USA	Indyk
ICALP Invited Tutorial	Kyoto, Japan	Indyk
ICASSP Invited Tutorial	Brisbane, Australia	Indyk
Colloquium	Moscow State University, Russia	Razenshteyn
Colloquium	Columbia University, USA	Razenshteyn
Colloquium	IBM Research Almaden, USA	Razenshteyn
Colloquium	Johns Hopkins University, USA	Razenshteyn
Colloquium	IT University of Copenhagen, Denmark	Razenshteyn
Colloquium	New York University, USA	Razenshteyn
Colloquium	Miscrosoft Research, USA	Razenshteyn
Colloquium	Boston University, USA	Razenshteyn
Colloquium	ETH Zurich, Switzerland	Schmidt

Information Theory and Applications Workshop invited talk	La Jolla, USA	Demaine
MoSAIC Fest: Math of Science, Art, Industry & Culture invited talk	Cambridge, USA	Demaine
Colloquium	Tufts University, USA	Demaine
Colloquium	Boston University, USA	Demaine

EDUCATIONAL ACTIVITIES **SECTION C**

List only **includes** 2015 information for AU employees (as well as relevant information for MIT, MPI and FRA employees taught **outside** their home institution). PhD student TA'ing is not included.

Title of activity	ECTS	Length of course (number of hours)
BSc course: Algorithms and Data Structures 1. Spring 2015	5	28
BSc course: Algorithms and Data Structures 2. Spring 2015	5	28
BSc course: Computer Science in Perspective (topic Algoritms and Complexity, and Internet Algorithms, 2 out of 7 weeks). Fall 2015	5	6
BSc course: Multivariate analysis of biological data. Fall 2015	5	56
BSc course: Computability and Logic. Fall 2015	5	21
MSc course: Algorithm Engineering. Spring 2015	5	21
MsC course: Algorithmic Gems. Spring 2015	5	21
MSc course: Topics in Discrete Geometry. Spring 2015	10	36
MSc course: Machine Learning. Fall 2015	10	56
MSc course: Computational Geometry. Fall 2015	10	36
MSc course: I/O-efficient algorithms. Fall 2015	10	36
MSc course: Algorithm Engineering. Spring 2015	5	21
PhD course: R for macroecology and global change. Summer 2015	4	40
PhD course: Statistics refresher. Summer 2015	4	24
NCPC ("Danish championships") and Northwestern Europe Regional (NWERC) Programming Contest Coaching		

Number of Master Graduates	Number of Bachelor Graduates
16	1

EXTERNAL FUNDING **SECTION D**

List **only includes** information for AU employees; it includes all active/new funding in 2015.

	Funding body	Purpose	Grant holder	Activity period	Granted amount in DKK	Partial amount allocated to the reported year
Public Danish funds	State Library	PhD Fellowship	AU (Brodal and Nielsen)	2011-2015	~1.000.000	0
	Innovation Fond Denmark	Realistic large-area flood risk screening	AU (Arge), COWI and SCALGO	2013-2016	~2.800.000	~1.000.000
	Innovation Fond Denmark	Industrial Post Doc	AU (Arge and Grønlund) and Insero Software	2013-2016	~1.800.000	~650.000
	The Danish Council for Independent Research | Natural Sciences	Macroecology of the Grasses	AU (Sandel)	2015-2016	~1.800.000	~900.000
	Danish Agency for Science, Technology and Innovation	Network Activity	AU (Afshani)	2015	200.000	200.000
Private Danish funds	COWI and SCALGO	Realistic large-area flood risk screening (co-funding)	AU (Arge), COWI and SCALGO	2013-2016	~1.450.000	~500.000
	Insero Sofware	Industrial Post Doc (co-funding)	AU (Arge and Grønlund) and Insero Software	2013-2016	~850.000	~200.000
	Realdania	Klimaspring projekt: Det dynamiske oversvømmelses kort	AU (Arge), SCALGO, Alien Workshop, COWI, NIRAS, Silkeborg Kommune, Odense Kommune, Aarhus Vand, Vandcenter Syd, DMI, Alexandra Instituttet	2015-2017	~7.200.000	~700.000

	SCALGO, Alien Workshop, COWI, NIRAS, Silkeborg Kommune, Odense Kommune, Aarhus Vand, Vandcenter Syd, DMI, Alexandra Instituttet	Klimaspring projekt: Det dynamiske oversvømmelses kort (co-funding)	AU (Arge), SCALGO, Alien Workshop, COWI, NIRAS, Silkeborg Kommune, Odense Kommune, Aarhus Vand, Vandcenter Syd, DMI, Alexandra Instituttet	2015-2017	~6.000.000	~700.000
International funds	EU Horizon 2020	BACI - the Biosphere atmosphere change index	Brody Sandel (for AU portion of the project)	2015-2019	~2.200.000	~300.000

PUBLIC OUTREACH **SECTION F**

List **only includes** 2015 information for AU employees.

a) Electronic media

Specific media (TV, radio, other)	Type of communication (interview, commentary, debate, feature program, etc.)	Subject	Contributor from the Center
realdania.dk	Press release	Dynamisk oversvømmelseskort kan afsløre oversvømmelserne, før regnen kommer	SCALGO/MADALGO
CEDI.dk	Article	Opdag oversvømmelserne, før regnen kommer	SCALGO/MADALGO
smithinnovation.dk	Press release	Vinderne i den åbne idekonkurrence	SCALGO
cs.au.dk	Article	Discover floods before the rain comes	SCALGO
cs.au.dk	Article	Assistant Professor Peyman Afshani receives framework grant from the Danish Agency for Science, Technology and Innovation	Afshani
alexandra.dk	Article	Oversvømmelseskort gennemtestes i praksis	SCALGO/MADALGO

b) Press

Specific media (newspapers, journals, magazines, other)	Type of communication (interview, commentary, debate, feature, etc.)	Subject	Contributor from the Center
Jyllands-Posten	Artikel	Betydningen af fri forskning	Arge
ForskerForum	Artikel	Top-75 i forskningens magtnetværk	Arge
Ritzaus Bureau	News	Dronningen har tildelt 21 medaljer	Arge
Jyllands-Posten	Artikel	It-folk håber på Apple-effekt i Aarhus	MADALGO

c) Other

Specific type of communication (presentation/lecturing at open university, high school, etc.)	Subject	Contributor from the Center
c) Other	Big Data Possabilities and Challanges	Arge
Folkeuniversitetet lecture, Copenhagen	Big Data Possabilities and Challanges	Arge
IT-Camp for piger (Workshop for female high school students interested in ICT)	Algorithms	Rav and Eenberg
The World's Most Boring Lecture (Tågekammeret)	Primes	Brodal

AWARDS **SECTION E**

List **includes** relevant 2015 information for AU as well as MIT, MPI and FRA researchers.

Awards	Recipient	Granted amount in DKK, if relevant
Ridder af Dannebrogsordenden	Arge	
Foreign Associate, United States National Academy of Sciences	Mehlhorn	
Elected Fellow of the Association for Computing Machinery (ACM)	Indyk	
Best Paper Award, International Conference on Machine Learning	Hegde, Indyk and Schmidt	
European Association for Theoretical Computer Science (EATCS) and International Symposium on Parameterized and Exact Computation (IPEC) Nerode Prize	Demaine	
University of Waterloo Faculty of Mathematics Young Alumni Achievement Medal	Demaine	
Aarhus University Computer Science Teaching Assistant of the Year	Rav	
Aarhus University Computer Science Student Award	Eenberg	
Promotion to Associate Professor with Tenure	Afshani	
Member of Præsidium of The Royal Danish Academy of Science and Letters	Arge	

PATENTS AND APPLICATIONS **SECTION G**

List **only includes** 2015 information for AU employees.

Number of inventions reported to institution	Number of submitted patent applications	Number of granted patents	Number of mutually agreed licence, sale and option agreements	Names of spin-off companies established

PUBLICATIONS **SECTION H**

Publication list/counts **includes** relevant publications for AU as well as MIT, MPI and FRA researchers.

TOTAL NUMBER OF PUBLICATIONS IN THE REPORTED YEAR	Peer reviewed	Not peer reviewed
Number of journal articles	29	0
Number of conference proceedings	40	4
Number of monographs	0	0
Number of book chapters	0	0
Others	0	17

The 10 most prestegious conferences within the Center's research area

1. ACM Symposium on Theory of Computing (STOC)
2. IEEE Symposium on Foundations of Computer Science (FOCS)
3. ACM-SIAM Symposium on Discrete Algorithms (SODA)
4. Symposium on Computational Geometry (SoCG)
5. International Colloquium on Automata, Languages, and Programming (ICALP)
6. European Symposium on Algorithms (ESA)
7. ACM Symposium on Parallelism in Algorithms and Architectures (SPAA)
8. International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX)/ International Workshop on Randomizationand Computation (RANDOM)
9. Scandinavian Workshop on Algorithm Theory (SWAT)/ Algorithms and Data Structures Symposium (WADS), previously Workshop on Algorithms and Data Structures
10. Workshop on Algorithm Engineering and Experiments (ALENEX)

The 10 most prestegious journals in the Center's research area

1. Journal of the ACM
2. SIAM Journal on Computing
3. ACM Transactions on Algorithms
4. Discrete & Computational Geometry
5. Algorithmica
6. Journal of Computer and System Sciences
7. Computational Geometry: Theory and Applications
8. ACM Journal of Experimental Algorithmics
9. Theoretical Computer Science
10. Journal of Discrete Algorithms

Bibliometric information

Distribution of center publications on 10 most prestigious conferences:

	2007	2008	2009	2010	2011	2012	2013	2014	2015
STOC	1	0	0	0	3	4	1	1	4
FOCS	1	7	3	2	3	1	0	3	4
SODA	0	6	5	6	6	11	11	7	5
SoCG	0	5	3	3	2	3	2	2	3
ICALP	1	0	7	1	3	2	5	4	0
ESA	3	1	0	3	1	5	3	2	2
SPAA	3	1	0	3	1	1	0	2	0
APPROX/RANDOM	0	1	0	1	3	0	0	0	0
SWAT/WADS	1	3	6	1	3	1	2	2	5
ALENEX	0	0	1	0	1	0	1	2	1

STOC, FOCS and SODA can be rated as "best non specialized" conferences
SoCG and ALENEX can be rated as "best specialized" conferences

Center publications have been authored by 807 unique authors - 124 associated with the center and 683 not.
Only 192 center publications are by center researchers only.

Citations to center publication (according to Google scholar, which is the most reliable - but certainly not perfect - source of citation information in the area) can be found at
http://scholar.google.com/citations?user=fRowhXcAAAAJ

Conference proceedings

C1	2007	B. Escoffier, G. Moruz and A. Ribichini	Adapting Parallel Algorithms to the W-Stream Model, with Applications to Graph Problems	Proc. International Symposium on Mathematical Foundations of Computer Science (MFCS)	(PR)(CO)
C2	2007	S. Guha, P. Indyk and A. McGregor	Sketching Information Divergences	Proc. Annual Conference on Learning Theory (COLT)	(PR)(CO)
C3	2007	G. S. Brodal and A. G. Jørgensen	A Linear Time Algorithm for the k Maximal Sums Problem	Proc. International Symposium on Mathematical Foundations of Computer Science (MFCS)	(PR)(CO)
C4	2007	G. S. Brodal, L. Georgiadis, K. A. Hansen and I. Katriel	Dynamic Matchings in Convex Bipartite Graphs	Proc. International Symposium on Mathematical Foundations of Computer Science (MFCS)	(PR)(CO)
C5	2007	G. Jørgensen, G. Moruz and T. Mølhave	Resilient Priority Queues	Proc. International Workshop on Algorithms and Data Structures (WADS)	(PR)
C6	2007	G. S. Brodal, R. Fagerberg, I. Finocchi, F. Grandoni, G. Italiano, A. G. Jørgensen, G. Moruz and T. Mølhave	Optimal Resilient Dynamic Dictionaries	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C7	2007	P. K. Agarwal, L. Arge, A. Danner, H. Mitasova, T. Mølhave and K. Yi	TerraStream: From Elevation Data to Watershed Hierarchies	Proc. ACM International Symposium on Advances in Geographical Information Systems (ACM-GIS)	(PR)(CO)
C8	2007	M. Patrascu and Mikkel Thorup	Planning for Fast Connectivity Updates	Proc. IEEE Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C9	2007	G. Franceschini, S. Muthukrishnan, and M. Patrascu	Radix Sorting With No Extra Space	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C10	2007	E. D. Demaine, S. Mozes, B. Rossman and O. Weimann	An Optimal Decomposition Algorithm for Tree Edit Distance	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)
C11	2007	M. A. Bender, M. Farach-Colton, J. T. Fineman, Y. Fogel, B. C. Kuszmaul and J. Nelson	Cache-Oblivious Streaming B-trees	Proc. ACM Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)
C12	2007	E. D. Demaine, M. Ghodsi, M. Hajiaghayi, A. S. Sayedi-Roshkhar and M. Zadimoghaddam	Scheduling to Minimize Gaps and Power Consumption	Proc. ACM Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)
C13	2007	M. Patrascu	Lower Bounds for 2-Dimensional Range Counting	Proc. ACM Symposium on Theory of Computing (STOC)	(PR)
C14	2007	G. M. Landau, D. Tsur and O. Weimann	Indexing a Dictionary for Subset Matching Queries	Proc. Symposium on String Processing and Information Retrieval (SPIRE)	(PR)(CO)
C15	2007	T. Friedrich and D. Ajwani	Average-Case Analysis of Online Topological Ordering	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)

C16	2007	K. Chang	Multiple pass streaming algorithms for learning mixtures of distributions in R^d	Proc. Algorithmic Learning Theory (ALT)	(PR)
C17	2007	M. Westergaard, L. M. Kristensen, G. S. Brodal and L. Arge	The ComBack Method - Extending Hash Compaction with Backtracking	Proc. International Conference on Applications and Theory of Petri Nets and Other Models of Concurrency (ICATPN)	(PR)
C18	2007	M. A. Bender, G. S. Brodal, R. Fagerberg, R. Jacob and E. Vicari	Optimal Sparse Matrix Dense Vector Multiplication in the I/O-Model	Proc. ACM Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)
C19	2007	A. Golynski, R. Grossi, A. Gupta, R. Raman and S. S. Rao	On the Size of Succinct Indices	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C20	2007	M. Olsen	Nash Stability in Additively Separable Hedonic Games is NP-hard	Proc. Conference on Computability in Europe (CiE)	(PR)
C21	2008	M. Ruzic and P. Indyk	Near-Optimal Sparse Recovery in the L1 norm	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C22	2008	M. Patrascu	(Data) STRUCTURES	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)
C23	2008	M. Patrascu	Succincter	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)
C24	2008	E. Demaine, S. Langerman and E. Price	Confluently Persistent Tries for Efficient Version Control	Proc. Scandinavian Workshop on Algorithm Theory (SWAT)	(PR)(CO)
C25	2008	D. Ajwani, I. Malinger, U. Meyer and S. Toledo	Characterizing the Performance of Flash Memory Storage Devices and Its Impact on Algorithm Design	Proc. Workshop on Experimental Algorithms (WEA)	(PR)(CO)
C26	2008	U. Meyer	On Dynamic Breadth-First Search in External-Memory	Proc. Symposium on Theoretical Aspects (STACS)	(PR)
C27	2008	U. Meyer	On Trade-Offs in External-Memory Diameter Approximation	Proc. Scandinavian Workshop on Algorithm Theory (SWAT)	(PR)
C28	2008	G. S. Brodal and A. G. Jørgensen	Selecting Sums in Arrays	Proc.International Symposium on Algorithms and Computation (ISAAC)	(PR)
C29	2008	L. Arge, G. S. Brodal and S. S. Rao	External Memory Planar Point Location with Logarithmic Updates	Proc. Symposium on Computational Geometry (SoCG)	(PR)
C30	2008	A. Golynski, R. Raman and S. S. Rao	On the Redundancy of Succinct Data Structures	Proc. Scandinavian Workshop on Algorithm Theory (SWAT)	(PR)(CO)
C31	2008	M. Olsen	The Computational Complexity of Link Building	Proc. International Conference on Computing and Combinatorics (COCOON)	(PR)
C32	2008	M.A. Abam, M. de Berg and J. Gudmundsson	A Simple and Efficient Kinetic Spanner	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)

C33	2008	L. Arge, M.T. Goodrich, M. Nelson and N. Sitchinava	Fundamental Parallel Algorithms for Private-Cache Chip Multiprocessors	Proc. Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)
C34	2008	L. Arge, T. Moelhave and N. Zeh	Cache-Oblivious Red-Blue Line Segment Intersection	Proc. European Symposium on Algorithm (ESA)	(PR)(CO)
C35	2008	P.K. Agarwal, L. Arge, T. Moelhave and B. Sadri	I/O-efficient Algorithms for Computing Contour Lines on a Terrain	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)
C36	2008	J. Feldman, S. Muthukrishnan, A. Sidiropoulos, C. Stein and Z. Svitkina	On Distributing Symmetric Streaming Computations	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C37	2008	P. Indyk	Explicit Constructions for Compressed Sensing of Sparse Signals	Proc Symposium on Discrete Algorithms (SODA)	(PR)
C38	2008	A. Andoni, P. Indyk and R. Krauthgamer	Earth Mover Distance over High-Dimensional Spaces	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C39	2008	P. Indyk and A. McGregor	Declaring Independence via the Sketching of Sketches	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C40	2008	K. Onak and A. Sidiropoulos	Circular Partitions with Applications to Visualization and Embeddings	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)
C41	2008	J. Matousek and A. Sidiropoulos	Inapproximability for metric embeddings into R^d	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C42	2008	N. J. A. Harvey, J. Nelson and K. Onak	Sketching and Streaming Entropy via Approximation Theory	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C43	2008	A. Andoni, D. Croitoru and M. Patrascu	Hardness of Nearest Neighbor under L-infinity	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C44	2008	T. Chan, M. Patrascu and L. Roditty	Dynamic Connectivity: Connecting to Networks and Geometry	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C45	2008	S. Mozes, K. Onak and Oren Weimann	Finding an Optimal Tree Searching Strategy in Linear Time	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C46	2008	A. Chakrabarti, T.S. Jayram and M. Patrascu	Tight Lower Bounds for Selection in Randomly Ordered Streams	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C47	2008	E. Demaine, T. Ito, Ni. J. A. Harvey, C. H. Papadimitriou, M. Sideri, R. Uehara and Yushi Uno	On the Complexity of Reconfiguration Problems	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C48	2008	E. Demaine, G. Aloupis, S. Collette, S. Langerman, V. Sacristan and S. Wuhrer	Reconfiguration of Cube-Style Modular Robots Using O(log n) Parallel Moves	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C49	2008	E. Demaine, M. Buadoiu, M. Hajiaghayi, A. Sidiropoulos and M. Zadimoghaddam	Ordinal Embedding: Approximation Algorithms and Dimensionality Reduction	Proc. International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX)	(PR)(CO)
C50	2008	E. Demaine, T. G. Abbott, Z. Abel, D. Charlton, M. L. Demaine and S. D. Kominers	Hinged Dissections Exist	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)

C51	2008	E. R. Hansen, S. S. Rao and P. Tiedemann	Compressing Binary Decision Diagrams	European Conference on Artificial Intelligence (ECAI)	(PR)(CO)
C52	2008	R. Berinde, P. Indyk and M. Ruzic	Practical Near-Optimal Sparse Recovery in the L1 Norm (invited paper)	Proc. Allerton Conference	(CO)
C53	2008	R. Berinde, A. Gilbert, P. Indyk, H. Karloff and M. Strauss	Combining Geometry and Combinatorics: A Unified Approach to Sparse Signal Recovery (invited paper)	Proc. Allerton Conference	(CO)
C54	2008	M.A. Abam, M. de Berg, and S-H. Poon	Fault-Tolerant Conflict-Free Coloring	Proc. Canadian Conference on Computational Geometry	(CO)
C55	2009	R. Berinde, G. Cormode, P. Indyk and M. Strauss	Space-optimal Heavyhitters with Strong Error Bounds	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)
C56	2009	V. Cevher, C. Hegde, P. Indyk and R. G. Baraniuk	Recovery of Clustered Sparse Signal from Compressive Measurements	Proc. International Conference on Sampling Theory and Applications (SAMPTA)	(PR)(CO)
C57	2009	E. Demaine, G. Landau and O. Weimann	On Cartesian Trees and Range Minimum Queries	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)
C58	2009	D. Hermelin, G. M. Landau, S. Landau and O. Weimann	A Unified Algorithm for Accelerating Edit-Distance Computation via Text-Compression	Proc. International Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)
C59	2009	A. Kovacs, U. Meyer, G. Moruz and A. Negoescu	Online Paging for Flash Memory Devices	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)
C60	2009	G. Brodal, A. Jørgensen, G. Moruz and T. Mølhave	Counting in the Presence of Memory Faults	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)
C61	2009	D. Ajwani, A. Beckmann, R. Jacob, U. Meyer and G. Moruz	On Computational Models for Flash Memory Devices	Proc. Symposium on Experimental Algorithms (SEA)	(PR)(CO)
C62	2009	U. Meyer and V. Osipov	Design and Implementation of a Practical I/O-efficient Shortest Paths Algorithm	Proc. Workshop on Algorithm Engineering and Experiments (ALENEX)	(PR)
C63	20009	U. Meyer	Via Detours to I/O-Efficient Shortest Paths	Proc. Efficient Algorithms - Essays dedicated to Kurt Mehlhorn on the Occasion of his 60th birthday	
C64	2009	D. Ajwani, R. Dementiev, U. Meyer and V. Osipov	Breadth First Search on Massive Graphs	Proc. Ninth DIMACS Implementation Challenge: The Shortest Path Problem	(PR)
C65	2009	A. Beckmann, R. Dementiev and J. Singler	Building a Parallel Pipelined External Memory Algorithm Library	Proc. International Symposium on Parallel and Distributed Processing (IPDPS)	(PR)
C66	2009	G. S. Brodal and A. Jørgensen	Data Structures for Range Median Queries	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)

C67	2009	G. S. Brodal, R. Fagerberg, M. Greve and A. López-Ortiz	Online Sorted Range Reporting	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C68	2009	G. S. Brodal, A. Kaporis, S. Sioutas, K. Tsakalidis and K. Tsichlas	Dynamic 3-sided Planar Range Queries with Expected Doubly Logarithmic Time	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C69	2009	G. S. Brodal, A. Jørgensen and T. Mølhave	Fault Tolerant External Memory Algorithms	Proc. Algorithms and Data Structures Symposium (WADS)	(PR)
C70	2009	A. Kaporis, A.N. Papadopoulos, S. Sioutas, K. Tsakalidis and K. Tsichlas	Efficient Processing of 3-Sided Range Queries with Probabilistic Guarantees	Proc. International Conference on Database Theory (ICDT)	(PR)(CO)
C71	2009	M. Abam, M. de Berg, M. Farshi, J. Gudmundsson and M. Smid	Geometric Spanners for Weighted Point Sets	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C72	2009	M. Abam and M. de Berg	Kinetic Spanners in R^d	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)
C73	2009	M. Abam, P. Carmi, M. Farshi and M. Smid	On the Power of the Semi-Separated Pair Decomposition	Proc. Algorithms and Data Structures Symposium (WADS)	(PR)(CO)
C74	2009	D. Ajwani	On P-complete Problems in Memory Hierarchy Models	Proc. Workshop on Massive Data Algorithmics (MASSIVE)	
C75	2009	A. Farzan, R. Raman and S. Srinivasa Rao	Universal Succinct Representations of Trees?	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)
C76	2009	R. Pagh and S. Srinivasa Rao	Secondary Indexing in One Dimension: Beyond B-trees and Bitmap Indexes	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)
C77	2009	R. Grossi, A. Orlandi, R. Raman and S. Srinivasa Rao	More Haste, Less Waste: Lowering the Redundancy in Fully Indexable Dictionaries	Proc. International Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)
C78	2009	J. E. Moeslund, P. K. Bøcher, J.-C. Svenning, T. Mølhave and L. Arge	Impacts of 21st Century Sea-level Rise on a Danish Major City – An Assessment Based on Fine-resolution Digital Topography and a New Flooding Algorithm	IOP Conference Series: Earth and Environmental Science 8	(PR)
C79	2009	M. de Berg and P. Hachenberger	Rotated-Box Trees: A Lightweight c-Oriented Bounding-Volume Hierarchy	Proc. International Symposium on Experimental Algorithms (SEA)	(PR)(CO)
C80	2009	P. Afshani, L. Arge and K. Dalgaard Larsen	Orthogonal Range Reporting in Three and Higher Dimensions	Proc Symposium on Foundations of Computer Science (FOCS)	(PR)
C81	2009	P. Afshani, C. Hamilton and N. Zeh	A Unified Approach for Cache-Oblivious Range Reporting and Approximate Range Counting	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)
C82	2009	P. Afshani, C. Hamilton and N. Zeh	Cache-Oblivious Range Reporting With Optimal Queries Requires Superlinear Space	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)

C83	2009	P. Afshani, J. Barbay and T. Chan	Instance-optimal Geometric Algorithms	Proc Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C84	2009	L. Arge, M.T. Goodrich and N. Sitchinava	Parallel External Memory Model	Proc. Workshop on Theory and Many-Cores	
C85	2009	L. Arge and M. Revsbæk	I/O-Efficient Contour Tree Simplification	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)
C86	2009	A. Andoni, P. Indyk, R. Krauthgamer and H.L. Nguyen	Approximate Line Nearest Neighbor in High Dimensions	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C87	2009	A. Andoni, P. Indyk and R. Krauthgamer	Overcoming the L1 Non-embeddability Barrier: Algorithms for Product Metrics	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C88	2009	R. Berinde and P. Indyk	Sequential Sparse Matching Pursuit	Proc. Allerton Conference	(PR)(CO)
C89	2009	A. Andoni, K. Do Ba, P. Indyk and D. Woodruff	Efficient Sketches for Earth-Mover Distance, with Applications	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C90	2009	A. Andoni, P. Indyk, K. Onak and R. Rubinfeld	External Sampling	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)
C91	2009	E. Demaine, M. Demaine, G. Konjevod and R. Lang	Folding a Better Checkerboard	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C92	2009	J. Cardinal, E. Demaine, M. Demaine, S. Imahori, S. Langerman and R. Uehara	Algorithmic Folding Complexity	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C93	2009	E. Demaine, M. Hajiaghayi, and D. Marx	Minimizing Movement: Fixed-Parameter Tractability	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C94	2009	B. Ballinger, D. Charlton, E. Demaine, M. Demaine, J. Iacono, C-H. Liu and S-H. Poon	Minimal Locked Trees	Proc. Algorithms and Data Structures Symposium (WADS)	(PR)(CO)
C95	2009	E. Demaine, D. Kane and G. Price	A Pseudopolynomial algorithm for Alexandrov's Theorem	Proc. Algorithms and Data Structures Symposium (WADS)	(PR)(CO)
C96	2009	T. Ito, M. Kaminski and E. Demaine	Reconfiguration of List Edge-Colorings in a Graph	Proc. Algorithms and Data Structures Symposium (WADS)	(PR)(CO)
C97	2009	E. Demaine, M. Hajiaghayi and K. Kawarabayashi	Approximation Algorithms via Structural Results for Apex-Minor-Free Graphs	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)
C98	2009	E. Demaine, M. Hajiaghayi and P. Klein	Node-Weighted Steiner Tree and Group Steiner Tree in Planar Graphs	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)
C99	2009	E. Demaine, G. Borradaile and S. Tazari	Polynomial-Time Approximation Schemes for Subset-Connectivity Problems in Bounded-Genus Graphs	Proc. International Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)
C100	2009	E. Demaine, D. Harmon, J. Iacono, D. Kane and M. Patrascu	The Geometry of Binary Search Trees	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)

C101	2009	E. Demaine, K. Kawarabayashi and M. Hajiaghayi	Additive Approximation Algorithms for List-Coloring Minor-Closed Class of Graphs	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C102	2009	E. Demaine, M. Hajiaghayi, H. Mahini and M. Zadimoghaddam	The Price of Anarchy in Cooperative Network Creation Games	Proc. International Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)
C103	2009	J. Cardinal, E. Demaine, S. Fiorini, G. Joret, I. Newman and O. Weimann	The Stackelberg Minimum Spanning Tree Game on Planar and Bounded-Treewidth Graphs	Proc. Workshop on Internet and Network Economics (WINE)	(PR)(CO)
C104	2009	J. McLurkin and E. Demaine	A Distributed Boundary Detection Algorithm for Multi-Robot Systems	Proc. International Conference on Intelligent Robots and Systems	(PR)(CO)
C105	2009	G. Aloupis, N. Benbernou, M. Damian, E. Demaine, R. Flatland, J. Iacono and S. Wuhrer	Efficient Reconfiguration of Lattice-Based Modular Robots	Proc. European Conference on Mobile Robots	(PR)(CO)
C106	2009	M. Ajtai, V. Feldman, A. Hassidim and J. Nelson	Sorting and Selection with Imprecise Comparisons	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)
C107	2009	R. Yuster and O. Weimann	Computing the Girth of a Planar Graph in O(n log n) time	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)
C108	2009	R. Backofen, G. Landau, M. Möhl, D. Tsur and O. Weimann	Fast RNA Structure Alignment for Crossing Input Structures	Proc. Symposium on Combinatorial Pattern Matching (CPM)	(PR)(CO)
C109	2009	P. Klein, S. Mozes and O. Weimann	Shortest Paths in Directed Planar Graphs with Negative Lengths: A Linear-Space O(n log n)-Time Algorithm	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C110	2010	K. Do Ba, P. Indyk, E. Price and D.P. Woodruff	Lower Bounds for Sparse Recovery	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C111	2010	P. Indyk, H.Q. Ngo and A. Rudra	Efficiently Decodable Non-adaptive Group Testing	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C112	2010	D.M. Kane, J. Nelson and D.P. Woodruff	An Optimal Algorithm for the Distinct Elements Problem	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)
C113	2010	J. Nelson and D.P. Woodruff	Fast Manhattan Sketches in Data Streams	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)
C114	2010	I. Diakonikolas, D.M. Kane and J. Nelson	Bounded Independence Fools Degree-2 Threshold Functions	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C115	2010	D.M. Kane, J. Nelson and D.P. Woodruff	On the Exact Space Complexity of Sketching and Streaming Small Norms	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C116	2010	A. Beckmann , U. Meyer, P. Sanders and J. Singler	Energy-Efficient Sorting using Solid State Disks	Proc. International IEEE Green Computing Conference	(PR)(CO)
C117	2010	M. Greve, A.G. Jørgensen, K.D. Larsen and J. Truelsen	Cell Probe Lower Bounds and Approximations for Range Mode	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)

C118	2010	M. Olsen	Maximizing PageRank with new Backlinks	Proc. International Conference on Algorithms and Complexity (CIAC)	(PR)
C119	2010	G.S. Brodal, E. Demaine, J. T. Fineman, J. Iacono, S. Langerman and J.I. Munro	Cache-Oblivious Dynamic Dictionaries with Optimal Update/Query Tradeoff	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C120	2010	A. Kaporis, A.N. Papadopoulos, S. Sioutas, K. Tsakalidis and K. Tsichlas	Efficient Processing of 3-Sided Range Queries with Probabilistic Guarantees	Proc. International Conference on Database Theory (ICDT)	(PR)(CO)
C121	2010	M.A. Abam and S. Har-Peled	New constructions of SSPDs and their applications	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)
C122	2010	M.B. Kjærgaard, H. Blunck, T. Godsk, T. Toftkjær, D.L. Christensen, and K. Grønbæk	Indoor Positioning using GPS Revisited	Proc. International Conference on Pervasive Computing (Pervasive)	(PR)
C123	2010	L. Arge, M.T. Goodrich and N. Sitchinava	Parallel external memory graph algorithms	Proc. International Parallel & Distributed Processing Symposium (IPDPS)	(PR)(CO)
C124	2010	P. Afshani, L. Arge and K.D. Larsen	Orthogonal Range Reporting: Query Lower Bounds, Optimal Structures in 3-d, and Higher Dimensional Improvements	Proc. Symposium on Computational Geometry (SoCG)	(PR)
C125	2010	P. Afshani, L. Arge and K.D Larsen	I/O-Efficient Orthogonal Range Reporting in Three and Higher Dimensions	Proc. Workshop on Massive Data Algorithmics (MASSIVE)	
C126	2010	T. Mølhave, P.K. Agarwal, L. Arge and M. Revsbæk	Scalable Algorithms for Large High-Resolution Terrain Data	Proc. International Conference on Computing for Geospatial Research & Application (COM.GEO)	(PR)(CO)
C127	2010	L. Arge, M. Revsbæk and Norbert Zeh	I/O-Efficient Computation of Water Flow Across a Terrain	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)
C128	2010	G.S. Brodal, P. Davoodi and S.S. Rao	On Space Efficient Two Dimensional Range Minimum Data Structures	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C129	2010	D. Ajwani, N. Sitchinava and N. Zeh	Geometric Algorithms for Private-Cache Chip Multiprocessors	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C130	2010	Z. Abel, N. Benbernou, M. Damian, E.D. Demaine, M.L. Demaine, R. Flatland, S. Kominers and R. Schwelle	Shape Replication Through Self-Assembly and RNase Enzymes	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C131	2010	E.D. Demaine, M. Hajiaghayi and K. Kawarabayashi	Decomposition, Approximation, and Coloring of Odd-Minor-Free Graphs	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C132	2010	N. Gershenfeld, D. Dalrymple, K. Chen, A. Knaian, F. Green, E.D. Demaine, S. Greenwald and P. Schmidt-Nielsen	Reconfigurable Asynchronous Logic Automata	Proc. Symposium on Principles of Programming Langauges (POPL)	(PR)(CO)

C133	2010	G. Aloupis, J. Cardinal, S. Collette, E.D. Demaine, M.L. Demaine, M. Dulieu, R. Fabila-Monroy, V. Hart, F. Hurtado, S. Langerman, M. Saumell, C. Seara and P. Taslakian	Matching Points with Things	Proc. Latin American Theoretical Informatics Symposium (LATIN)	(PR)(CO)
C134	2010	E.D. Demaine and M. Zadimoghaddam	Scheduling to Minimize Power Consumption using Submodular Functions	Proc. Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)
C135	2010	S. Gilbert, R. Guerraoui, F. Malakouti and M. Zadimoghaddam	Collaborative Scoring in the Presence of Malicious Players	Proc. Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)
C136	2010	N. Alon, E.D. Demaine, M. Hajiaghayi and T. Leighton	Basic Network Creation Games	Proc. Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)
C137	2010	E.D. Demaine and M. Zadimoghaddam	Minimizing the Diameter of a Network using Shortcut Edge	Proc. Scandinavian Workshop on Algorithm Theory (SWAT)	(PR)
C138	2010	M. Bateni, M.H. Hajiaghayi and M. Zadimoghaddam	Submodular Secretary Problem and Extensions	Proc. Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX)	(PR)(CO)
C139	2010	B. Ballinger, N. Benbernou, P. Bose, M. Damian, E.D. Demaine, V. Dujmović, R. Flatland, F. Hurtado, J. Iacono, A. Lubiw, P. Morin, V. Sacristán, D. Souvaine and R. Uehara	Coverage with k-Transmitters in the Presence of Obstacles	Proc. International Conference on Combinatorial Optimization and Applications (COCOA)	(PR)(CO)
C140	2010	E.D. Demaine and M. Zadimoghaddam	Constant Price of Anarchy in Network Creation Games via Public Service Advertising	Proc. International Workshop on Algorithms and Models for the Web-Graph	(PR)
C141	2010	G. S. Brodal, C. Kejlberg-Rasmussen and J. Truelsen	A Cache-oblivious Implicit Dictionary with the Working Set Property	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)
C142	2010	L. Arge, K. D. Larsen, T. Mølhave and F. van Walderveen	Cleaning Massive Sonar Point Clouds	Proc. International Conference on Advances in Geographic Information System (ACM-GIS)	(PR)
C143	2010	G.S Brodal, Ss.Sioutas, K. Tsichlas and C. Zaroliagis	D2-Tree: A New Overlay with Deterministic Bounds	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C144	2010	F. Gieseke, G. Moruz and J. Vahrenhold	Resilient kd-trees: K-means in space revisited	Proc. Conference on Data Mining (ICDM)	(PR)(CO)
C145	2010	J. Brody and E. Verbin	The Coin Problem and Pseudorandomness for Branching Programs	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C146	2011	H. Blunck, M. B. Kjærgaard and T. S. Toftegaard	Sensing and Classifying Impairments of GPS Reception on Mobile Devices	Proc. International Conference on Pervasive Computing (Pervasive)	(PR)(CO)

C147	2011	A. G. Jorgensen and K. G. Larsen,	Range Selection and Median: Tight Cell Probe Lower Bounds and Adaptive Data Structures	Proc. Symposium on Discrete Algorithms (SODA)	(PR)
C148	2011	P. Afshani, P. K. Agarwal, L. Arge, K. G. Larsen and J. M. Phillips	(Approximate) Uncertain Skylines	Proc. International Conference on Database Theory (ICDT)	(PR)(CO)
C149	2011	T. M. Chan, K. G. Larsen and M. Patrascu	Orthogonal Range Searching on the RAM, Revisited	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)
C150	2011	K. G. Larsen	On Range Searching in the Group Model and Combinatorial Discrepancy	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)
C151	2011	M. de Berg and C. Tsirogiannis	Exact and Approximate Computations of Watersheds on Triangulated Terrains	Proc. International Conference on Advances in Geographic Information Systems (ACM-GIS)	(PR)(CO)
C152	2011	H.Haverkort and C. Tsirogiannis	Flow on Noisy Terrains: An Experimental Evaluation	Proc. International Conference on Advances in Geographic Information Systems (ACM-GIS)	(PR)(CO)
C153	2011	D. Ajwani, N. Sitchinava and N. Zeh	I/O-Optimal Distribution Sweeping on Private-Cache Chip Multiprocessors	Proc. International Symposium on Parallel and Distributed Processing (IPDPS)	(PR)(CO)
C154	2011	M.T. Goodrich, N. Sitchinava and Q. Zhang	Sorting, Searching, and Simulation in the MapReduce Framework	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C155	2011	M. A. Abam, S. Daneshpajouh, L. Deleuran, S. Ehsani and M. Ghodsi	Computing Homotopic Line Simplification in a Plane	Proc. European Workshop on Computational Geometry (EuroCG)	(CO)
C156	2011	P. Afshani and N. Zeh	Improved Space Bounds for Cache-Oblivious Range Reporting	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C157	2011	P. Afshani, G.S. Brodal and N. Zeh	Ordered and Unordered Top-K Range Reporting in Large Data Sets	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C158	2011	G.S. Brodal, G. Moruz, and A. Negoescu	OnlineMin: A Fast Strongly Competitive Randomized Paging Algorithm	Proc. Workshop on Approximation and Online Algorithms (WAOA)	(PR)
C159	2011	G.S. Brodal, P. Davoodi, and S.S. Rao	Path Minima Queries in Dynamic Weighted Trees	Proc. Workshop on Algorithms and Data Structures (WADS)	(PR)(CO)
C160	2011	G.S. Brodal and K. Tsakalidis	Dynamic Planar Range Maxima Queries	Proc. International Colloquium on Automata, Languages, and Programming (ICALP)	(PR)
C161	2011	G.S. Brodal, M. Greve, V. Pandey and S.S. Rao	Integer Representations towards Efficient Counting in the Bit Probe Model	Proc. Conference on Theory and Applications of Models of Computation (TAMC)	(PR)(CO)
C162	2011	H.L. Chan, T.W. Lam, L.K. Lee, J. Pan, H.F. Ting and Q. Zhang	Edit Distance to Monotonicity in Sliding Windows	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR) (CO)

C163	2011	D. Ajwani, A. Cosgaya-Lozano and N. Zeh	Engineering a Topological Sorting Algorithm for Massive Graphs	Proc. Workshop on Algorithm Engineering and Experiments (ALENEX)	(PR)(CO)
C164	2011	S.H. Chan, T.W. Lam, L.K. Lee, C.M. Liu and H.F. Ting	Sleep management on multiple machines for energy and flow time	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR) (CO)
C165	2011	A.G. Jørgensen, M. Loffler and J. Phillips	Geometric Computations on Indecisive Points	Proc. International Workshop on Algorithms and Data Structures (WADS)	(PR)(CO)
C166	2011	P. Davoodi and S. Srinivasa Rao	Succinct Dynamic Cardinal Trees with Constant Time Operations for Small Alphabet	Proc. Theory and Applications of Models of Computation (TAMC)	(PR)(CO)
C167	2011	E. Verbin and W. Yu	The Streaming Complexity of Cycle Counting, Sorting By Reversals, and Other Problems	Proc. Symposium on Discrete Algorithms (SODA)	(PR)
C168	2011	U. Meyer, A. Negoescu and V. Weichert	New bounds for old algorithms: On the average-case behavior of classic single-source shortest path approaches	Proc. Conference on Theory and Practice of Algorithms in (Computer) Systems (TAPAS)	(PR)
C169	2011	M. Manjunath, K. Mehlhorn, K. Panagiotou and H. Sun	Approximate Counting of Cycles in Streams	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C170	2011	E. Price	Efficient Sketches for the Set Query Problem	Proc. Symposium on Discrete Algorithms (SODA)	(PR)
C171	2011	P. Indyk and E. Price	K-Median Clustering, Model-Based Compressive Sensing, and Sparse Recovery for Earth Mover Distance	Proc. Symposium on Theory of Computing (STOC)	(PR)
C172	2011	P. Indyk, E. Price and D. P. Woodruff	On the Power of Adaptivity in Sparse Recovery	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C173	2011	R. Gupta, P. Indyk, E. Price and Y. Rachlin	Compressive Sensing with Local Geometric Features	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)
C174	2011	E. Price and D. P. Woodruff	(1+eps)-approximate sparse recovery	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)
C175	2011	D. M. Kane, J. Nelson, E. Porat and D. P. Woodruff	Fast Moment Estimation in Data Streams in Optimal Space	Proc. Symposium on Theory of Computing (STOC)	(PR)(CO)
C176	2011	D. M. Kane, R. Meka and J. Nelson	Almost Optimal Explicit Johnson-Lindenstrauss Transformations	Proc. International Workshop on Randomization and Computation (RANDOM)	(PR)(CO)
C177	2011	D. B. Khanh and P. Indyk	Sparse recovery with partial support knowledge	Proc. Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX)	(PR)(CO)

C178	2011	K. Kawarabayashi, P. N. Klein and C. Sommer	Linear-Space Approximate Distance Oracles for Planar, Bounded-Genus, and Minor-Free Graphs	Proc. International Colloquium on Automata, Languages, and Programming (ICALP)	(PR)(CO)
C179	2011	C. Gavoille and C. Sommer	Sparse Spanners vs. Compact Routing	Proc. Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)
C180	2011	H. N. Djidjev and C. Sommer	Approximate Distance Queries for Weighted Polyhedral Surfaces	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C181	2011	D. Alistarh, J. Aspnes, K. Censor-Hillel, S. Gilbert and M. Zadimoghaddam	Optimal-Time Adaptive Tight Renaming, with Applications to Counting	Proc. Symposium on Principles of Distributed Computing (PODC)	(PR)(CO)
C182	2011	A. Karbasi and M. Zadimoghaddam	Compression with Graphical Constraints: An Interactive Browser	Proc. International Symposium on Information Theory (ISIT)	(PR)(CO)
C183	2011	B. Haeupler, V. Mirrokni and M. Zadimoghaddam	Online Stochastic Weighted Matching: Improved Approximation Algorithms	Proc. Workshop on Internet & Network Economics	(PR)(CO)
C184	2011	Z. Abel, E. D. Demaine, M. L. Demaine, S. Eisenstat, J. Lynch, T. B. Schardl and I. Shapiro-Ellowitz	Folding Equilateral Plane Graphs	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)
C185	2011	E. D. Demaine, S. Eisenstat, M. Ishaque and A. Winslow	One-Dimensional Staged Self-Assembly	Proc. International Conference on DNA Computing and Molecular Programming	(PR)(CO)
C186	2011	E. D. Demaine, M. L. Demaine, S. Eisenstat, A. Lubiw and A. Winslow	Algorithms for Solving Rubik's Cubes	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)
C187	2011	E. D. Demaine and S. Eisenstat	Flattening Fixed-Angle Chains Is Strongly NP-Hard	Proc. International Workshop on Algorithms and Data Structures (WADS)	(PR)
C188	2011	P. Christiano, E. D. Demaine and S. Kishore	Lossless Fault-Tolerant Data Structures with Additive Overhead	Proc. International Workshop on Algorithms and Data Structures (WADS)	(PR)(CO)
C189	2011	P. Berman, E. D. Demaine and M. Zadimoghaddam	O(1)-Approximations for Maximum Movement Problems	Proc. Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX)	(PR)(CO)
C190	2011	G. Aloupis, E. D. Demaine, M. L. Demaine, V. Dujmovic and J. Iacono	Meshes preserving minimum feature size	Proc. Spanish Meeting on Computational Geometry	(CO)
C191	2011	E. D. Demaine and A. Lubiw	A generalization of the source unfolding of convex polyhedra	Proc. Spanish Meeting on Computational Geometry	(CO)
C192	2011	E. D. Demaine, M. Hajiaghayi and K. Kawarabayashi	Contraction Decomposition in H-Minor-Free Graphs and Algorithmic Applications	Proc. Symposium on Theory of Computing (STOC)	(PR)(CO)
C193	2011	E. D. Demaine, M. J. Patitz, R. T. Schweller and S. M. Summers	Self-Assembly of Arbitrary Shapes Using RNAse Enzymes: Meeting the Kolmogorov Bound with Small Scale Factor	Proc. Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)

C194	2011	E. D. Demaine and A. Schulz	Embedding Stacked Polytopes on a Polynomial-Size Grid	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)
C195	2012	P. Davoodi, M. Smid and F. van Walderveen	Two-Dimensional Range Diameter	Proc. Latin American Symposium on Theoretical Informatics (LATIN)	(PR)(CO)(OA)
C196	2012	L. Arge, M.T. Goodrich and F. van Walderveen	Computing betweenness centrality in external memory	Workshop on Massive Data Algorithmics (MASSIVE)	(CO)(OA)
C197	2012	K. G. Larsen and R. Pagh	I/O-Efficient Data Structures for Colored Range and Prefix Reporting	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C198	2012	T. M. Chan, S. Durocher, K. G. Larsen, J. Morrison and B. T. Wilkinson	Linear-Space Data Structures for Range Mode Query in Arrays	Proc. Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)(OA)
C199	2012	K. G. Larsen	The Cell Probe Complexity of Dynamic Range Counting	Proc. Symposium on Theory of Computing (STOC)	(PR)(OA)
C200	2012	P. Afshani, L. Arge and K. G. Larsen	Higher-dimensional Orthogonal Range Reporting and Rectangle Stabbing in the Pointer Machine Model	Proc. Symposium on Computational Geometry (SoCG)	(PR)(OA)
C201	2012	K. G. Larsen and H. L. Nguyen	Improved Range Searching Lower Bounds	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)(OA)
C202	2012	K. G. Larsen	Higher Cell Probe Lower Bounds for Evaluating Polynomials	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(OA)
C203	2012	L. Arge, L. Deleuran, T. Mølhave, M. Revsbæk and J. Truelsen	Simplifying Massive Contour Maps	Proc. European Symposium on Algorithms (ESA)	(PR)(OA)
C204	2012	Z. Huang, K. Yi and Q. Zhang,	Randomized Algorithms for Tracking Distributed Count, Frequencies, and Ranks	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)(OA)
C205	2012	D.P. Woodruff and Q. Zhang	Tight Bounds for Distributed Functional Monitoring	Proc. Symposium on Theory of Computing (STOC)	(PR)(CO)(OA)
C206	2012	J. M. Phillips, E. Verbin and Q. Zhang	Lower Bounds for Number-in-Hand Multiparty Communication Complexity, Made Easy	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C207	2012	E. Verbin and Q. Zhang	Rademacher-Sketch: A Dimensionality-Reducing Embedding for Sum-Product Norms, with an Application to Earth-Mover Distance	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(OA)
C208	2012	H.L. Chan, S.H. Chan, T.W. Lam, L.K. Lee, and J. Zhu	Non-clairvoyant weighted flow time scheduling with rejection penalty	Proc. ACM Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)(OA)
C209	2012	G. S. Brodal, J. A. S. Nielsen and J. Truelsen	Finger search in the implicit model	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(OA)
C210	2012	G.S. Brodal and C. Kejlberg-Rasmussen	Cache-Oblivious Implicit Predecessor Dictionaries with the Working-Set Property	Proc. Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(OA)

C211	2012	X. Sun , C. Wang and W. Yu	The Relationship between Inner Product and Counting Cycles	Proc. Latin American Theoretical Informatics Symposium (LATIN)	(PR)(CO)(OA)
C212	2012	P. Davoodi, R. Raman and S. S. Rao	Succinct Representations of Binary Trees for Range Minimum Queries	Proc. International Computing and Combinatorics Conference (COCOON)	(PR)(CO)(OA)
C213	2012	G.S. Brodal, S. Sioutas, K. Tsakalidis and K. Tsichlas	Fully Persistent B-trees	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C214	2012	G.S. Brodal, G. Lagogiannis and R.E. Tarjan.	Strict Fibonacci Heaps	Proc. Symposium on Theory of Computing (STOC)	(PR)(CO)(OA)
C215	2012	G.S Brodal, P. Davoodi, M. Lewenstein, R. Raman and S. S. Rao	Two Dimensional Range Minimum Queries and Fibonacci Lattices	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)(OA)
C216	2012	D. Ajwani, A. Beckmann, U. Meyer and D. Veith	I/O-efficient approximation of graph diameter by parallel cluster growing - a first experimental study	Proc. Workshop on Parallel Systems and Algorithms (PASA)	(PR)(CO)(OA)
C217	2012	A. Beckmann, J. Fedorowicz, J.Keller and U. Meyer	A structural analysis of the A5/1 state transition graph	Proc. Workshop on Graph Inspection and Traversal Engineering (GRAPHite)	(PR)(CO)(OA)
C218	2012	G. Moruz and A. Negoescu	Outperforming LRU via Competitive Analysis on Parametrized Inputs for Paging	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(OA)
C219	2012	G. Moruz, A. Negoescu, C. Neumann and V. Weichert	Engineering Efficient Paging Algorithms	Proc. Symposium on Experimental Algorithms (SEA)	(PR)(OA)
C220	2012	H. Hassanieh, P. Indyk, D. Katabi and E. Price	Simple and Practical Algorithm for Sparse Fourier Transform	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C221	2012	H. Hassanieh, P. Indyk, D. Katabi and E. Price	Nearly Optimal Sparse Fourier Transform	Proc. Symposium on Theory of Computing (STOC)	(PR)(CO)(OA)
C222	2012	S. Mozes and C. Sommer	Exact Distance Oracles for Planar Graphs	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C223	2012	T. Akiba, C. Sommer and K-i Kawarabayashi	Shortest-Path Queries for Complex Networks: Exploiting Low Tree-width Outside the Core	Proc. International Conference on Extending Database Technology (EDBT)	(PR)(CO)(OA)
C224	2012	S. Kreutzer and S. Tazari	Directed Nowhere Dense Classes of Graphs	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C225	2012	V.S. Mirrokni, S. O. Gharan and M. Zadimoghaddam	Simultaneous approximations for adversarial and stochastic online budgeted allocation	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C226	2012	D. M. Kane and J. Nelson	Sparser Johnson-Lindenstrauss Transforms	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C227	2012	C. Tsirogiannis, B. Sandel and D. Cheliotis	Efficient Computation of Popular Phylogenetic Tree Measures	Proc. Workshop on Algorithms in Bioinformatics (WABI)	(PR)(CO)(OA)
C228	2012	L. Arge, H. Haverkort and C. Tsirogiannis	Fast Generation of Multiple Resolution Instances of Raster Data Sets	Proc. International Conference on Advances in Geographic Information Systems (ACM-GIS)	(PR)(CO)(OA)
C229	2012	P. Afshani and N. Zeh	Lower Bounds for Sorted Geometric Queries in the I/O Model	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)(OA)

C230	2012	P. Afshani	Improved pointer machine and I/O lower bounds for simplex range reporting and related problems	Proc. ACM Symposium on Computational Geometry (SoCG)	(PR)(OA)
C231	2012	T. M. Chan, S. Durocher, M. Skala, and B. T. Wilkinson	Linear-Space Data Structures for Range Minority Query in Arrays	Proc. Scandinavian Workshop on Algorithm Theory (SWAT)	(PR)(CO)(OA)
C232	2012	H. Jowhari	Efficient Communication Protocols for Deciding Edit Distance	Proc. European Symposium on Algorithms (ESA)	(PR)(OA)
C233	2012	L. K. Lee, M. Lewenstein and Q. Zhang.	Parikh matching in the streaming model	Proc. International Symposium on String Processing and Information Retrieval (SPIRE)	(PR)(CO)(OA)
C234	2012	D. Belazzougui and R. Venturini	Compressed String Dictionary Look-up with Edit Distance One	Proc. Symposium on Combinatorial Pattern (CPM)	(PR)(CO)(OA)
C235	2012	B. Ammitzbøll Jurik and J.A.S. Nielsen	Audio Quality Assurance: An Application of Cross Correlation	Proc. iPRES Conference	(PR)(CO)(OA)
C236	2012	N. Sitchinava and N. Zeh	A parallel buffer tree	Proc. ACM Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)(OA)
C237	2012	D. Ajwani, U. Meyer and D. Veith	I/O-efficient Hierarchical Diameter Approximation	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)(OA)
C238	2012	D. Kane, K. Mehlhorn, T. Sauerwald and H. Sun	Counting Arbitrary Subgraphs in Data Streams	Proc. International Colloquium on Automata, Languages, and Programming (ICALP)	(PR)(
C239	2012	M. Wibral, P. Wollstadt, U. Meyer, N. Pampu, V.Priesemann and R. Vicente	Revisiting Wiener's principle of causality — interaction-delay reconstruction using transfer entropy and multivariate analysis on delay-weighted graphs	Proc. International Confonference in Medicine & Biology Society (EMBC)	(PR)(CO)(OA)
C240	2012	P. Indyk, R. Levi and R. Rubinfeld	Approximating and Testing k-Histogram Distributions in Sub-linear Time	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)(OA)
C241	2012	J. Wang, H. Hassanieh, D. Katabi and P. Indyk	Efficient and Reliable Low-Power Backscatter Networks	Proc. International Conference on Mobile Computing and Networking (SIGCOMM)	(PR)(CO)(OA)
C242	2012	H. Hassanieh, F. Adib, D. Katabi and P. Indyk	Faster GPS Via the Sparse Fourier Transform	Proc. International Conference on Mobile Computing and Networking (MOBICOM)	(PR)(CO)(OA)
C243	2012	E. Price and D. Woodruff	Applications of the Shannon-Hartley Theorem to Data Streams and Sparse Recovery	Proc. International Symposium on Information Theory (ISIT)	(PR)(CO)(OA)
C244	2012	L. Hamilton, D. Parker, C. Yu and P. Indyk	Focal Plane Array Folding for Efficient Information Extraction and Tracking	Proc. Applied Imagery Patterns Recognition Workshop (AIPR)	(PR)(CO)(OA)
C245	2013	E. Price and D. Woodruff	Lower Bounds for Adaptive Sparse Recovery	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)

C246	2013	A. Andoni, H. Hassanieh, P. Indyk and D. Katabi	Shift Finding in Sub-linear Time	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C247	2012	E.D. Demaine, M.L. Demaine, Y. N. Minsky, J.S.B. Mitchell, R.L. Rivest and M. Patrascu	Picture-Hanging Puzzles	Proc. International Conference on Fun with Algorithms	(CO)(OA)
C248	2012	E. D. Demaine, M.L. Demaine, J-i. Itoh, A. Lubiw, C. Nara and J. O'Rourke	Refold Rigidity of Convex Polyhedra	Proc. European Workshop on Computational Geometry	(CO)(OA)
C249	2012	S. Lim, C. Sommer, E. Nikolova and D. Rus	Practical Route Planning Under Delay Uncertainty: Stochastic Shortest Path Queries	Proc. Robotics: Science and Systems VIII	(PR)(CO)(OA)
C250	2012	C. Ratti and C. Sommer	Approximating Shortest Paths in Spatial Social Networks	Proc. International Conference on Social Computing	(PR)(CO)(OA)
C251	2012	M. Zadimoghaddam and A. Roth	Efficiently Learning from Revealed Preference	Proc. International Workshop on Internet and Network Economics	(PR)(CO)(OA)
C252	2012	C. Guo, Y. Ma, B. Yang, C. S. Jensen and M. Kaul	EcoMark: Evaluating Models of Vehicular Environmental Impact	Proc. International Conference on Advances in Geographic Information Systems (ACM-GIS)	(PR)(CO)(OA)
C253	2012	X. Li, P. Karras, L. Shi, K.-L. Tan and C. S. Jensen	Cooperative Scalable Moving Continuous Query Processing	Proc. International Conference on Mobile Data Management (MDM)	(PR)(CO)(OA)
C254	2012	D. Šidlauskas, C. S. Jensenand S. Šaltenis	A Comparison of the Use of Virtual Versus Physical Snapshots for Supporting Update-Intensive Workloads	Proc. International Workshop on Data Management on New Hardware (DaMoN)	(PR)(CO)(OA)
C255	2012	J. Rishede, M. L. Yiu and C. S. Jensen	Effective Caching of Shortest Paths for Location-Based Services	Proc. International Conference on the Management of Data (SIGMOD)	(PR)(CO)(OA)
C256	2012	D. Šidlauskas, S. Šaltenis and C. S. Jensen	Parallel Main-Memory Indexing for Moving-Object Query and Update Workloads	Proc. International Conference on the Management of Data (SIGMOD)	(PR)(CO)(OA)
C257	2012	H. Lu, X. Cao and C. S. Jensen	A Foundation for Efficient Indoor Distance-Aware Query Processing	Proc. International Conference on Data Engineering (ICDE)	(PR)(CO)(OA)
C258	2012	H. Lu and C. S. Jensen	Upgrading Uncompetitive Products Economically	Proc. International Conference on Data Engineering (ICDE)	(PR)(CO)(OA)
C259	2012	X. Cao, L. Chen, G. Cong, C. S. Jensen, Q. Qu, A. Skovsgaard, D. Wu and M. L. Yiu	Spatial Keyword Querying (invited paper)	Proc. International Conference on Conceptual Modeling (ER)	(CO) (OA)
C260	2013	M. Olsen and M. Revsbæk	Alliances and Bisection Width for Planar Graphs	Proc. International Workshop on Algorithms and Computation (WALCOM)	(PR)(OA)
C261	2013	K.G. Larsen and F. van Walderveen	Near-Optimal Range Reporting Structures for Categorical Data	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(OA)
C262	2013	K. Bringmann and K.G. Larsen	Succinct Sampling from Discrete Distributions	Proc. ACM Symposium on Theory of Computing (STOC)	(PR)(CO)(OA)

C263	2013	Chr. Tsirogiannis and Con. Tsirogiannis	Uncovering the Missing Routes : An Algorithmic Study on the Illicit Antiquities Trade Network	Proc. Conference on Computer Applications and Quantitative Methods in Archaeology (CAA)	(PR)(CO)(OA)
C264	2013	C. Tsirogiannis and B. Sandel	Computing the Skewness of the Phylogenetic Mean Pairwise Distance in Linear Time	Proc. Workshop on Algorithms in Bioinformatics (WABI)	(PR)(CO)(OA)
C265	2013	L. Arge, G.S. Brodal, J. Truelsen and C. Tsirogiannis	An Optimal and Practical Cache-Oblivious Algorithm for Computing Multiresolution Rasters	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)(OA)
C266	2013	L. Arge, M. de Berg and C. Tsirogiannis	Algorithms for Computing Prominence on Grid Terrains	Proc. International Conference on Advances in Geographic Information System (ACM-GIS)	(PR)(CO)(OA)
C267	2013	L. Arge and M. Thorup	RAM-Efficient External Memory Sorting	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR) (CO)(OA)
C268	2013	L. Arge, M.T. Goodrich and F. van Walderveen	Computing betweenness centrality in external memory	Proc. IEEE International Symposium on Big Data	(PR)(CO)(OA)
C269	2013	L. Arge, J. Fischer, P. Sanders and N. Sitchinava	On (Dynamic) Range Maximum Queries in External Memory	Proc. Workshop on Algorithms and Data Structures (WADS)	(PR)(CO)(OA)
C270	2013	L. Arge, F. van Walderveen and N. Zeh	Multiway simple cycle separators and I/O-efficient algorithms for planar graphs	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C271	2013	G.S. Brodal, A. Brodnik and P. Davoodi	The Encoding Complexity of Two Dimensional Range Minimum Data Structures	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)(OA)
C272	2013	A. Sand, G.S. Brodal, R. Fagerberg, C.N.S. Pedersen and T. Mailund	A practical O(n log n) time algorithm for computing the triplet distance on binary trees	Proc. Asia Pacific Bioinformatics Conference (APBC)	(PR)(CO)(OA)
C273	2013	G.S. Brodal, R. Fagerberg, C.N.S. Pedersen, T. Mailund and A. Sand	Efficient Algorithms for Computing the Triplet and Quartet Distance Between Trees of Arbitrary Degree	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C274	2013	S. Pettie and H.-H. Su	Fast Distributed Coloring Algorithms for Triangle-Free Graphs	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)(OA)
C275	2013	C. Kejlberg-Rasmussen, Y. Tao, J. Yoon, K. Tsichlas and K. Tsakalidis	I/O-Efficient Planar Range Skyline and Attrition Priority Queues	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)(OA)
C276	2013	Z. Wei and K. Yi	The Space Complexity of 2-Dimensional Approximate Range Counting	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C277	2013	E. Verbin and W. Yu	Data Structure Lower Bounds on Random Access to Grammar-Compressed Strings	Proc. Symposium on Combinatorial Pattern Matching (CPM)	(PR)(OA)

C278	2013	D. Belazzougui and R. Venturini	Compressed Static Functions with Applications	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C279	2013	T.M. Chan and B.T. Wilkinson	Adaptive and Approximate Orthogonal Range Counting	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C280	2013	S. Alamdari, P. Angelini, T.M. Chan, G. Di Battista, F. Frati, A. Lubiw, M. Patrignani, V. Roselli, S. Singla and B.T. Wilkinson	Morphing Planar Graph Drawings with a Polynomial Number of Steps	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C281	2013	T. Jurkiewicz and K. Mehlhorn	The Cost of Address Translation	Proc. Workhop on Algorithm Engineering and Experiments (ALENEX)	(PR)(OA)
C282	2013	G. Moruz and A. Negoescu	Improved space bounds for strongly competitive randomized paging algorithms	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(OA)
C283	2013	A. Beckmann, U. Meyer, and D. Veith	An Implementation of I/O-Efficient Dynamic Breadth-First Search Using Level-Aligned Hierarchical Clustering	Proc. European Symposium on Algorithms (ESA)	(PR) (CO)(OA)
C284	2013	L. Radaelli and C.S. Jensen	Towards Fully Organic Indoor Positioning	Proc. International Workshop on Indoor Spatial Awareness (ISA)	(PR)(CO)(OA)
C285	2013	X. Li, V. Ceikute, C.S. Jensen and K.-L. Tan	Trajectory Based Optimal Segment Computation in Road Network Databases	Proc. International Conference on Advances in Geographic Information Systems (ACM-GIS)	(PR)(CO)(OA)
C286	2013	M.B. Kjærgaard, M.V. Krarup, A. Stisen, T.S. Prentow, H. Blunck, K. Grønbæk and C.S. Jensen	Indoor Positioning using Wi-Fi—How Well Is the Problem Understood?	Proc. International Conference on Indoor Positioning and Indoor Navigation (IPIN)	(PR)(CO)(OA)
C287	2013	V. Ceikute and C.S. Jensen	Routing Service Quality—Local Driver Behavior Versus Routing Services	Proc. International Conference on Mobile Data Management (MDM)	(PR)(CO)(OA)
C288	2013	M. Kaul, B. Yang and C.S. Jensen	Building Accurate 3D Spatial Networks to Enable Next Generation Intelligent Transportation Systems	Proc. International Conference on Mobile Data Management (MDM)	(PR)(CO)(OA)
C289	2013	L. Radaelli, D. Sabonis, H. Lu and C.S. Jensen	Identifying Typical Movements Among Indoor Objects—Concepts and Empirical Study	Proc. International Conference on Mobile Data Management (MDM)	(PR)(CO)(OA)
C290	2013	A. Baniukevic, C.S. Jensen and H. Lu	Hybrid Indoor Positioning With Wi-Fi and Bluetooth: Architecture and Performance	Proc. International Conference on Mobile Data Management (MDM)	(PR)(CO)(OA)
C291	2013	O. Andersen, C.S. Jensen, K. Torp and B. Yang	EcoTour: Reducing the Environmental Footprint of Vehicles Using Eco-Routes	Proc. International Conference on Mobile Data Management (MDM)	(PR)(CO)(OA)
C292	2013	L.R.A. Derczynski, B. Yang and C.S. Jensen	Towards Context-Aware Search and Analysis on Social Media Data	Proc. International Conference on Extending Database Technology (EDBT)	(PR)(CO)(OA)

C293	2013	B. Yang, N. Fantini and C.S. Jensen	iPark: Identifying Parking Spaces from Trajectories	Proc. International Conference on Extending Database Technology (EDBT)	(PR)(CO)(OA)
C294	2013	E. Grant, C. Hegde and P. Indyk	Nearly Optimal Linear Embeddings into Very Low Dimensions	Proc. Global Conference on Signal and Information Processing (GlobalSIP)	(PR)(CO)(OA)
C295	2013	S. Abbar, S. Amer-Yahia, P. Indyk, S. Mahabadi and K.R. Varadarajan	Diverse near neighbor problem	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)(OA)
C296	2013	E. Grant and P. Indyk	Compressive sensing using locality-preserving matrices	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)(OA)
C297	2013	L. Schmidt, C. Hegde and P. Indyk	The Constrained Earth Movers Distance Model, with Applications to Compressive Sensing	Proc. International Conference on Sampling Theory and Applications (SampTA)	(PR)(CO)(OA)
C298	2013	S. Abbar, S. Amer-Yahia, P. Indyk and S. Mahabadi	Real-time recommendation of diverse related articles	Proc. International conference on World Wide Web (WWW)	(PR)(CO)(OA)
C299	2013	P. Indyk and I. Razenshteyn	On Model-Based RIP-1 Matrices	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)(OA)
C300	2013	B. Ghazi, H. Hassanieh, P. Indyk, D. Katabi, E. Price and L. Shi	Sample-optimal average-case sparse fourier transform in two dimensions	Proc. Allerton Conference	(PR)(CO)(OA)
C301	2013	E. Price and D. Woodruff	Lower Bounds for Adaptive Sparse Recovery	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C302	2013	A. Andoni, H. Hassanieh, P. Indyk and D. Katabi	Shift Finding in Sub-linear Time	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C303	2013	S. Har-Peled, P. Indyk and A. Sidiropoulos	Euclidean spanners in high dimensions	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C304	2013	E.D. Demaine, P. Panchekha, D. Wilson and E.Z. Yang	Blame Trees	Proc. Algorithms and Data Structures Symposium (WADS)	(PR)(CO)(OA)
C305	2013	E.D. Demaine, M.J. Patitz, T.A. Rogers, R.T. Schweller, S.M. Summers and D. Woods	The two-handed tile assembly model is not intrinsically universal	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)(OA)
C306	2013	E.D. Demaine, J. Iacono, S. Langerman and O. Ozkan	Combining Binary Search Trees	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)(OA)
C307	2013	S. Cannon, E.D. Demaine, M.L. Demaine, S. Eisenstat, M.J. Patitz, R. Schweller, S.M. Summers and A. Winslow	Two Hands Are Better Than One (up to constant factors): Self-Assembly In The 2HAM vs. aTAM	Proc. International Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)(OA)
C308	2013	Z. Abel, E.D. Demaine, M.L. Demaine, S. Eisenstat, A. Lubiw, A. Schulz, D. Souvaine, G. Viglietta and A. Winslow	Algorithms for Designing Pop-Up Cards	Proc. International Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)(OA)
C309	2013	E.D. Demaine and M. Zadimoghaddam	Learning Disjunctions: Near-Optimal Trade-off between Mistakes and "I Don't Know's"	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(OA)

C310	2013	A. Karbasi and M. Zadimoghaddam	Constrained Binary Identification Problem	Proc. International Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)(OA)
C311	2013	M. Bateni, N. Haghpanah, B. Sivan and M. Zadimoghaddam	Revenue Maximization with Nonexcludable Goods	Proc. International Conference on Web and Internet Economics (WINE)	(PR)(CO)(OA)
C312	2013	N. Korula, V.S. Mirrokni and M. Zadimoghaddam	Bicriteria Online Matching: Maximizing Weight and Cardinality	Proc. International Conference on Web and Internet Economics (WINE)	(PR)(CO)(OA)
C313	2013	G.S. Brodal	A Survey on Priority Queues	Proc. Conference on Space Efficient Data Structures, Streams and Algorithms	(OA)
C314	2013	P. Afshani, M. Agrawal, B. Doerr, C. Doerr, K.G. Larsen, K. Mehlhorn	The Query Complexity of Finding a Hidden Permutation	Proc. Conference on Space Efficient Data Structures, Streams and Algorithms	(CO)(OA)
C315	2013	E.D. Demaine, M.L. Demaine, S. Eisenstat, T.D. Morgan and R. Uehara	Variations on Instant Insanity	Proc. Conference on Space Efficient Data Structures, Streams and Algorithms	(CO)(OA)
C316	2013	N. Sundaram, A. Turmukhametova, N. Satish, T. Mostak, P. Indyk, S. Madden and P. Dubey	Streaming Similarity Search over one Billion Tweets using Parallel Locality-Sensitive Hashing	Proc. International Conference on Very Large Data Bases (VLDB)	(PR)(CO)(OA)
C317	2014	A. Skovsgaard, D. Sidlauskas and C.S. Jensen	Scalable Top-k Spatio-Temporal Term Querying	Proc. International Conference on Data Engineering (ICDE)	(PR)(OA)
C318	2014	A. Skovsgaard, D. Sidlauskas and C.S. Jensen	A Clustering Approach to the Discovery of Points of Interest from Geo-Tagged Microblog Posts	Proc. International Conference on Mobile Data Management (MDM)	(PR)(OA)
C319	2014	S. Alstrup, E. B. Halvorsen and K.G. Larsen,	Near-Optimal Labeling Schemes for Nearest Common Ancestors	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C320	2014	K.G. Larsen, I.J. Munro, J.S. Nielsen and S.V. Thankachan	On Hardness of Several String Indexing Problems	Proc. Symposium on Combinatorial Pattern Matching (CPM)	(PR)(CO)(OA)
C321	2014	G. S. Brodal and K. G. Larsen	Optimal Planar Orthogonal Skyline Counting Queries	Proc. Scandinavian Workshop on Algorithm Theory (SWAT)	(PR)(OA)
C322	2014	P. Afshani	Fast Computation of Output-Sensitive Maxima in a Word RAM	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(OA)
C323	2014	P. Afshani and K. Tsakalidis	Optimal Deterministic Shallow Cuttings for 3D Dominance Ranges	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C324	2014	P. Afshani, C. Sheng, Y. Tao and B.T. Wilkinson	Concurrent Range Reporting in Two-Dimensional Space	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C325	2014	P. Afshani, T.M. Chan and K. Tsakalidis	Deterministic Rectangle Enclosure and Offline Dominance Reporting on the RAM	Proc. International Colloquium on Automata, Languages, and Programming (ICALP)	(PR)(CO)(OA)
C326	2014	P. Afshani and N. Sitchinava	I/O-efficient Range Minima Queries	Proc. Workshops on Algorithm Theory (SWAT)	(PR)(CO)(OA)
C327	2014	B. T. Wilkinson	Amortized bounds for dynamic orthogonal range reporting	Proc. European Symposium on Algorithms (ESA)	(PR)(OA)

C328	2014	Z. Huang and K. Yi	The Communication Complexity of Distributed epsilon-Approximations	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)(OA)
C329	2014	K-M. Chung, S. Pettie and H.-H. Su	Distributed Algorithms for the Lovász Local Lemma and Graph Coloring	Proc. Symposium on Principles of Distributed Computing (PODC)	(PR)(CO)(OA)
C330	2014	S. Gilbert, V. King, S. Pettie, E. Porat, J. Saia and M. Young	(Near) Optimal Resource-Competitive Broadcast with Jamming	Proc. Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(CO)(OA)
C331	2014	H.-H. Su	Brief Announcement: A Distributed Minimum Cut Approximation Scheme	Proc. Symposium on Parallelism in Algorithms and Architectures (SPAA)	(PR)(OA)
C332	2014	D.Belazzougui, G. S. Brodal and J. S. Nielsen	Expected Linear Time Sorting for Word Size Ω(log n loglogn)	Proc. Workshops on Algorithm Theory (SWAT)	(PR)(CO)(OA)
C333	2014	M.K. Holt, J. Johansen and G.S. Brodal	On the Scalability of Computing Triplet and Quartet Distances	Proc.Workshop on Algorithm Engineering and Experiments (ALENEX)	(PR)(OA)
C334	2014	Z. Wei and K. Yi	Equivalence between Priority Queues and Sorting in External Memory	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)(OA)
C335	2014	L Radaelli, Y. Moses and C.S. Jensen	Using Cameras to Improve Wi-Fi Based Indoor Positioning	Proc. International Symposium on Web and Wireless Geographical Information Systems	(PR)(CO)(OA)
C336	2014	B. Yang, C. Guo, C. S. Jensen, M. Kaul and S. Shang	Multi-Cost Optimal Route Planning under Time-Varying Uncertainty	Proc. International Conference on Data Engineering (ICDE)	(PR)(CO)(OA)
C337	2014	C. Silvestri, F. Lettich, S. Orlando and C.S. Jensen	GPU-based Computing of Repeated Range Queries over Moving Objects	Proc. Euromicro International Conference on Parallel, Distributed, and Network-Based Processing	(PR)(CO)(OA)
C338	2014	P. Indyk, M. Kapralov and E. Price	(Nearly) Sample-Optimal Sparse Fourier Transform	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C339	2014	A. Andoni, P. Indyk, H.L. Nguyen and I. Razenshteyn	Beyond Locality-Sensitive Hashing	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C340	2014	C. Hegde, P. Indyk and L. Schmidt	Approximation-Tolerant Model-Based Compressive Sensing	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C341	2014	Z. Abel, E. D. Demaine, M. L. Demaine, D. Eppstein, A. Lubiw and R. Uehara	Flat Foldings of Plane Graphs with Prescribed Angles and Edge Lengths	Proc. International Symposium on Graph Drawing (GD)	(PR)(CO)(OA)
C342	2014	E. D. Demaine, M. Hajiaghayi, H. Mahini, D. L. Malec, S. Raghavan, A. Sawant and M. Zadimoghaddam	How to Influence People with Partial Incentives	Proc. International World Wide Web Conference	(PR)(CO)(OA)
C343	2014	C.Tsirogiannis, B.Sandel and A. Kalvisa.	New algorithms for computing phylogenetic biodiversity.	Proc. Workshop on Algorithms in Bioinformatics (WABI)	(PR)(CO)(OA)
C344	2014	D. Sidlauskas and C. S. Jensen	Spatial Joins in Main Memory: Implementation Matters!	Proc. International Conference on Very Large Data Bases (VLDB)	(PR)(CO)(OA)

C345	2014	K. S. Bøgh, S. Chester, D. Sidlauskas and I. Assent	Hashcube: A Data Structure for Space- and Query-Efficient Skycube Compression	Proc. International Conference on Conference on Information and Knowledge Management (CIKM)	(PR)(CO)(OA)
C346	2014	A. Skovsgaard and C.S. Jensen	Top-k point of interest retrieval using standard indexes.	Proc. International Conference on Advances in Geographic Information Systems (ACM-GIS)	(PR)(OA)
C347	2014	D. Chen, C. Konrad, K. Yi, W. Yu and Q. Zhang	Robust Set Reconciliation	Proc. International Conference on Management of Data (SIGMOD)	(PR)(CO)(OA)
C348	2014	A. Grønlund and S. Pettie	Threesomes, Degenerates, and Love Triangles	IEEE Symposium on Foundations of Computer Science (FOCS 2014)	(PR)(OA)
C349	2014	D. Nanongkai and H.-H. Su	Almost-Tight Distributed Minimum Cut Algorithms	Proc. International Symposium Distributed Computing (DISC)	(PR)(CO)(OA)
C350	2014	J. I. Munro, G. Navarro, J. S. Nielsen, R. Shah and S. V. Thankachan	Top-k Term-Proximity in Succinct Space	Proc. International Symposium on Algorithms and Computation (ISAAC)	(PR)(CO)(OA)
C351	2014	P. Indyk, S.Mahabadi, M. Mahdian and V. S. Mirrokni	Composable Core-sets for Diversity and Coverage Maximization	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)(OA)
C352	2014	E.D. Demaine, P. Indyk, S. Mahabadi and A. Vakilian	On Streaming and Communication Complexity of the Set Cover Problem	Proc. International Symposium Distributed Computing (DISC)	(PR)(CO)(OA)
C353	2014	P. Indyk and M. Kapralov	Sample-Optimal Fourier Sampling in Any Constant Dimension	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)(OA)
C354	2014	L. Schmidt, C. Hegde, P. Indyk, J. Kane, L. Lu and D. Hohl	Automatic Fault Localization Using the Generalized Earth Mover's Distance	Proc. International Conference on Acoustics, Speech and Signal Processing (ICASSP)	(PR)(CO)(OA)
C355	2014	C. Hegde, P. Indyk and L. Schmidt	A Fast Approximation Algorithm for Tree-Sparse Recovery	Proc. International Symposium on Information Theory (ISIT)	(PR)(CO)(OA)
C356	2014	C. Hegde, P. Indyk and L. Schmidt	Nearly Linear-Time Model-Based Compressive Sensing	Proc. International Colloquium on Automata, Languages, and Programming (ICALP)	(PR)(CO)(OA)
C357	2014	A. Backurs and P. Indyk	Better embeddings for planar Earth-Mover Distance over sparse sets	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)(OA)
C358	2014	H. Hassanieh, L. Shi, O. Abari, E. Hamed and D. Katabi	GHz-wide sensing and decoding using the sparse Fourier transform	Proc. INFOCOM	(PR)(CO)
C359	2014	E. D. Demaine, Y. Huang, C.-S. Liao and K. Sadakane	Canadians Should Travel Randomly	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)(OA)

C360	2014	E. D. Demaine, M. L. Demaine, S. P. Fekete, M. J. Patitz, R. T. Schweller, A. Winslow and D. Woods	One Tile to Rule Them All: Simulating Any Tile Assembly System with a Single Universal Tile	Proc. International Colloquium on Automata, Languages and Programming (ICALP)	(PR)(CO)(OA)
C361	2014	G. Aloupis, E. D. Demaine, A. Guo and G. Viglietta	Classic Nintendo Games are (NP-)Hard	Proc. International Conference on Fun with Algorithms	(CO)(OA)
C362	2014	E. D. Demaine, F. Ma and E. Waingarten	Playing Dominoes is Hard, Except by Yourself	Proc. International Conference on Fun with Algorithms	(CO)(OA)
C363	2014	K. Yamanaka, E. D. Demaine, T. Ito, J. Kawahara, M. Kiyomi, Y. Okamoto, T. Saitoh, A. Suzuki, K. Uchizawa and T. Uno	Swapping Labeled Tokens on Graphs	Proc. International Conference on Fun with Algorithms	(CO)(OA)
C364	2014	E. D. Demaine and M. L. Demaine	Fun with Fonts: Algorithmic Typography	Proc. International Conference on Fun with Algorithms	(CO)(OA)
C365	2014	Z. Abel, E. D. Demaine, M. L. Demaine, J.-I. Itoh, A. Lubiw, C. Nara and J. O'Rourke	Continuously Flattening Polyhedra Using Straight Skeletons	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)(OA)
C366	2014	B. An, S. Miyashita, M. T. Tolley, D. M. Aukes, L. Meeker, E. D. Demaine, M. L. Demaine, R. J. Wood and D. Rus	An End-To-End Approach to Making Self-Folded 3D Surface Shapes by Uniform Heating	Proc. International Conference on Robotics and Automation	(PR)(CO)(OA)
C367	2014	A. Becker, E. D. Demaine, S. Fekete and J. McLurkin	Particle Computation: Designing Worlds to Control Robot Swarms with Only Global Signals	Proc. International Conference on Robotics and Automation	(PR)(CO)(OA)
C368	2014	Y. Bachrach, O. Lev, S. Lovett, J. S. Rosenschein and M. Zadimoghaddam	Cooperative weakest link games	Proc. International Conference on Autonomous Agents and Multiagent Systems	(PR)(CO)(OA)
C369	2014	A. Termehchy, A. Vakilian, Y. Chodpathumwan and M. Winslett	Which Concepts are Worth Extracting?	Proc. International Conference on the Management of Data (SIGMOD)	(PR)(CO)(OA)
C370	2014	A. Ene and A. Vakilian	Improved Approximation Algorithms for Degree-bounded Network Design Problems with Node Connectivity Requirements	Proc. Symposium on Theory of Computing (STOC)	(PR)(CO)(OA)
C371	2014	L. Arge, J. Truelsen and J. Yang	Simplifying massive planar subdivisions	Proc. Workshop on Algorithm Engineering and Experiments (ALENEX)	(PR)(OA)
C372	2015	Z. Huang, B. Radunovic, M. Vojnovic and Q. Zhang	Communication Complexity of Approximate Maximum Matching in Distributed Graph	Proc. Symposium on Theoretical Aspects of Computer Science (STACS)	(PR)(CO)(OA)
C373	2015	G. S. Brodal, J. S. Nielsen and J. Truelsen	Strictly Implicit Priority Queues: On the Number of Moves and Worst-Case Time	Proc. Workshop on Algorithms and Data Structures (WADS)	(PR)(OA)
C374	2015	M. Elkin and S. Pettie	A Linear-Size Logarithmic Stretch Path-Reporting Distance Oracle for General Graphs	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)

C375	2015	S. Pettie	Sharp Bounds on Formation-free Sequences	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(OA)
C376	2015	M. Elkin, S. Pettie and H.-H. Su	(2Δ-1)-Edge Coloring is Much Easier than Maximal Matching in the Distributed Setting	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C377	2015	T. Kopelowitz, S. Pettie and E. Porat	Dynamic Set Intersection	Proc. Workshop on Algorithms and Data Structures (WADS)	(PR)(CO)(OA)
C378	2015	P. K. Agarwal, T. Mølhave, M. Revsbæk, I. Safa, Y. Wang and J. Yang.	Maintaining Contour Trees of Dynamic Terrains	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)(OA)
C379	2015	S. Chester, D. Sidlauskas, I. Assent and K. S. Bøgh	Scalable parallelization of skyline computation for multi-core processors	Proc. IEEE Conference on Data Engineering (ICDE)	(PR)(CO)(OA)
C380	2015	W. Son and P. Afshani	Streaming Algorithms for Smallest Intersecting Ball of Disjoint Balls	Proc. Conference on Theory and Applications of Models of Computation (TAMC)	(PR)(OA)
C381	2015	M. Goswami, A. Grønlund, K. G. Larsen and R. Pagh	Approximate Range Emptiness in Constant Time and Optimal Space	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C382	2015	K. G. Larsen, J. Nelson and H. L. Nguyen	Time Lower Bounds for Nonadaptive Turnstile Streaming Algorithms	Proc. Symposium on Theory of Computing (STOC)	(PR)(CO)(OA)
C383	2015	D. Ajwani, U.Meyer and D. Veith	An I/O-efficient Distance Oracle for Evolving Real-World Graphs	Proc. Workshop on Algorithm Engineering and Experiments (ALENEX)	(PR)(CO)(OA)
C384	2015	A. Andoni and I. Razenshteyn	Optimal Data-Dependent Hashing for Approximate Near Neighbors	Proc. Symposium on Theory of Computing (STOC)	(PR)(CO)(OA)
C385	2015	Z. Allen-Zhu, R. Gelashvili and I. Razenshteyn	Restricted Isometry Property for General p-Norms	Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)(OA)
C386	2015	S. Lattanzi, S. Leonardi, V. Mirrokni and I. Razenshteyn	Robust Hierarchical k-Center Clustering	Proc. Innovations in Theoretical Computer Science (ITCS)	(PR)(CO)(OA)
C387	2015	A. Andoni, R. Krauthgamer and I. Razenshteyn	Sketching and Embedding are Equivalent for Norms.	Proc. Symposium on the Theory of Computing (STOC)	(PR)(CO)(OA)
C388	2015	C. Hegde, P. Indyk and L. Schmidt	A Nearly-Linear Time Framework for Graph-Structured Sparsity	Proc. International Conference on Machine Learning (ICML)	(PR)(CO)(OA)
C389	2015	L. Schmidt, C. Hegde, P. Indyk, L. Lu, X. Chi and D. Hohl	Seismic feature extraction using steiner tree methods	Proc. International Conference on Acoustics, Speech and Signal Processing (ICASSP)	(PR)(CO)(OA)
C390	2015	A. Andoni, P. Indyk, T. Laarhoven, I. P. Razenshteyn and L. Schmidt	Practical and Optimal LSH for Angular Distance	Proc. Advances in Neural Information Processing Systems (NIPS)	(PR)(CO)(OA)
C391	2015	A. Kim, E. Blais, A. G. Parameswaran, P. Indyk, S. Madden and R. Rubinfeld	Rapid Sampling for Visualizations with Ordering Guarantees	Proc. International Conference on Very Large Data Bases (VLDB)	(PR)(CO)(OA)
C392	2015	J. Acharya, I. Diakonikolas, C. Hegde, J. Z. Li and L. Schmidt	Fast and Near-Optimal Algorithms for Approximating Distributions by Histograms	Proc. Symposium on Principles of Database Systems (PODS)	(PR)(CO)(OA)

C393	2015	A. Backurs and P. Indyk	Edit Distance Cannot Be Computed in Strongly Subquadratic Time (unless SETH is false)	Proc. Symposium on the Theory of Computing (STOC)	(PR)(CO)(OA)
C394	2015	A. Kovacs, U. Meyer, and C. Ventre	Mechanisms with monitoring for truthful RAM allocation	Proc. Conference on Web and Internet Economics (WINE)	(PR)(CO)(OA)
C395	2015	P. Chalermsook, M. Goswami, L. Kozma, K. Mehlhorn and T. Saranurak	Self-Adjusting Binary Search Trees: What Makes Them Tick?	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)(OA)
C396	2015	P. Chalermsook, M. Goswami, L. Kozma, K. Mehlhorn and T. Saranurak	Pattern-Avoiding Access in Binary Search Trees	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)(OA)
C397	2015	P. Chalermsook, M. Goswami, L. Kozma, K. Mehlhorn and T. Saranurak	Greedy Is an Almost Optimal Deque	Proc. Workshop on Algorithms and Data Structures (WADS)	(PR)(CO)(OA)
C398	2015	L. Arge, M. Rav, S. Raza and M. Revsbæk	I/O-Efficient Event Based Depression Flood Risk	Proc. Workshop on Massive Data Algorithmics (MASSIVE)	(OA)
C399	2015	M. de Berg, C. Tsirogiannis and B.T. Wilkinson	Fast Computation of Categorical Richness on Raster Data Sets and Related Problems	Proc. International Conference on Advances in Geographic Information Systems (ACM-GIS)	(PR)(CO)(OA)
C400	2015	M. de Berg, C. Tsirogiannis and B.T. Wilkinson	Fast Computation of Categorical Richness on Raster Data Sets and Related Problems	Proc. Workshop on Massive Data Algorithmics (MASSIVE)	(CO)(OA)
C401	2015	C. Alexander, L. Arge, P. K. Bøcher, M. Revsbæk, B. Sandel, J-C. Svenning, C. Tsirogiannis and J. Yang	Computing River Floods Using Massive Terrain Data	Proc. Workshop on Massive Data Algorithmics (MASSIVE)	(OA)
C402	2015	P. Afshani and N. Sitchinava	Sorting and Permuting without Bank Conflicts on GPUs	Proc. European Symposium on Algorithms (ESA)	(PR)(CO)(OA)
C403	2015	A. Abboud, A. Backurs and V. A. Williams	If the Current Clique Algorithms are Optimal, So is Valiant's Parser	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)(OA)
C404	2015	R. Clifford, A. Grønlund and K. G. Larsen	New Unconditional Hardness Results for Dynamic and Online Problems	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)(OA)
C405	2015	E. D. Demaine, S. Fekete, C. Scheffer and A. Schmidt	New Geometric Algorithms for Fully Connected Staged Self-Assembly	Proc. International Conference on DNA Computing and Molecular Programming	(PR)(CO)(OA)
C406	2015	E. D. Demaine, T. Kaler, Q. Liu, A. Sidford and A. Yedidia	Polylogarithmic Fully Retroactive Priority Queues via Hierarchical Checkpointing	Proc. Workshop on Algorithms and Data Structures (WADS)	(PR)(CO)(OA)
C407	2015	E. D. Demaine, V. Gopal and W. Hasenplaugh	Cache-Oblivious Iterated Predecessor Queries via Range Coalescing	Proc. Workshop on Algorithms and Data Structures (WADS)	(PR)(CO)(OA)
C408	2015	A. T. Becker, E. D. Demaine, S. P. Fekete, H. M. Shad and R. Morris-Wright	Tilt: The Video -- Designing Worlds to Control Robot Swarms with Only Global Signals	Multimedia Exposition in Proc. Symposium on Computational Geometry (SoCG)	(PR)(CO)(OA)

C409	2015	H. M. Shad, R. Morris-Wright, E. D. Demaine, S. P. Fekete and A. Becker	Particle computation: Device fan-out and binary memory	Proc. IEEE International Conference on Robotics and Automation (ICRA)	(PR)(CO)(OA)
C410	2015	E. D. Demaine, S. Fekete and A. Schmidt	New Geometric Algorithms for Staged Self-Assembly	Proc. European Workshop on Computational Geometry (EuroCG)	(CO)(OA)
C411	2015	E. D. Demaine, D. Eppstein, A. Hesterberg, H. Ito, A. Lubiw, R. Uehara and Y. Uno	Folding a Paper Strip to Minimize Thickness	Proc. International Workshop on Algorithms and Computation (WALCOM)	(PR)(CO)(OA)
C412	2015	S. M. Oh, G. T. Toussaint, E. D. Demaine and M. L. Demaine	A Dissimilarity Measure for Comparing Origami Crease Patterns	Proc. International Conference on Pattern Recognition Applications and Methods (ICPRAM)	(PR)(CO)(OA)
C413	2015	A. Mehta, B. Waggoner and M. Zadimoghaddam	Online Stochastic Matching with Unequal Probabilities	Proc. Symposium on Discrete Algorithms (SODA)	(PR)(CO)(OA)
C414	2015	A. Bhaskara, A. Theertha and M. Zadimoghaddam	Sparse Solutions to Nonnegative Linear Systems and Applications	Proc. International Conference on Artificial Intelligence and Statistics (AISTATS)	(PR)(CO)(OA)
C415	2015	A. Abboud, A. Backurs and V. A. Williams	Tight Hardness Results for LCS and Other Sequence Similarity Measures.	Proc. Symposium on Foundations of Computer Science (FOCS)	(PR)(CO)(OA)

Journals

J1	2007	G. S. Brodal, R. Fagerberg and G. Moruz	On the Adaptiveness of Quicksort	ACM Journal of Experimental Algorithmics, 12	(PR) (CO)
J2	2008	D. Ajwani, T. Friedrich and U. Meyer	An O(n^{2.75}) Algorithm for Incremental Topological Ordering	ACM Transactions on Algorithms, 4(4)	(PR)
J3	2008	M. Stissing, T. Mailund, C. N. S. Pedersen, G. S. Brodal and R. Fagerberg	Computing the All-Pairs Quartet Distance on a set of Evolutionary Trees	Journal of Bioinformatics and Computational Biology, 6(1)	(PR)(CO)
J4	2008	L. Arge, M. de Berg, H. J. Haverkort and K. Yi	The Priority R-Tree: A Practically Efficient and Worst-Case Optimal R-Tree	ACM Transactions on Algorithms, 4(1)	(PR)(CO)
J5	2009	M. Olsen	Nash Stability in Additively Separable Hedonic Games and Community Structures	Theory of Computing Systems, 45(4)	(PR)
J6	2009	M. Abam, M. de Berg, M. Farshi and J. Gudmundsson	Region-Fault Tolerant Geometric Spanners	Discrete & Computational Geometry, 41(4)	(PR)(CO)
J7	2009	M. Abam, M. de Berg and B. Speckmann	Kinetic kd-Trees and Longest-Side kd-Trees	SIAM Journal of Computing, 39(4)	(PR)(CO)
J8	2009	L. Arge, V. Samoladas and K. Yi	Optimal External-Memory Planar Point Enclosure	Algorithmica, 54(3)	(PR)(CO)
J9	2009	L. Arge, M. de Berg and H. Haverkort	Cache-Oblivious R-Trees	Algorithmica, 53(1)	(PR)(CO)
J10	2009	H. Iben, J. O'Brien and E. Demaine	Refolding Planar Polygons	Discrete & Computational Geometry, 41(3)	(PR)(CO)
J11	2009	E. Demaine, M. Hajiaghayi, H. Mahini, A. Sayedi-Roshkhar, S. Oveisgharan and M. Zadimoghaddam	Minimizing Movement	ACM Transactions on Algorithms, 5(3)	(PR)(CO)

J12	2009	E. Demaine, M. Hajiaghayi and K. Kawarabayashi	Algorithmic Graph Minor Theory: Improved Grid Minor Bounds and Wagner's Contraction	Algorithmica, 54(2)	(PR)(CO)
J13	2009	T. Abbott, M. Burr, T. Chan, E. Demaine, M. Demaine, J. Hugg, D. Kane, S. Langerman, J. Nelson, E. Rafalin, K. Seyboth and V. Yeung	Dynamic Ham-Sandwich Cuts in the Plane	Computational Geometry: Theory and Applications, 42(5)	(PR)(CO)
J14	2009	E.D. Demaine, M. Hajiaghayi, H. Mahini and M. Zadimoghaddam	The Price of Anarchy in Network Creation Games	ACM SIGECOM Exchanges, 8(2)	(PR)(CO)
J15	2009	E.D. Demaine, M.L. Demaine, J. Iacono and S. Langerman	Wrapping Spheres with Flat Paper	Computational Geometry: Theory and Applications, 42(8)	(PR)(CO)
J16	2010	P. Indyk and A. Gilbert	Sparse Recovery Using Sparse Matrices	Proceedings of the IEEE June 2010	(PR)(CO)
J17	2010	E.D. Demaine, S.Langerman and E. Price	Confluently Persistent Tries for Efficient Version Control	Algorithmica 57(3)	(PR)(CO)
J18	2010	M.A. Abam, M. de Berg, P. Hachenberger and A. Zarei	Streaming Algorithms for Line Simplification	Discrete & Computational Geometry 43(3)	(PR)(CO)
J19	2010	M.A. Abam, M. de Berg and J. Gudmundsson	A Simple and Efficient Kinetic Spanner	Computational Geometry: Theory and Applications 43(3)	(PR)(CO)
J20	2010	D. Ajwani and T. Friedrich	Average-case Analysis of Incremental Topological Ordering	Discrete Applied Mathematics 158	(PR)(CO)
J21	2010	H. Blunck and J. Vahrenhold	In-Place Algorithms for Computing (Layers of) Maxima	Algorithmica 57(1)	(PR)(CO)
J22	2010	P. Indyk, Z. Syed, C. Stultz, M. Kellis and J. Guttag	Motif discovery in physiological datasets: A methodology for inferring predictive elements	ACM Transactions on Knowledge Discovery in Data 4(1)	(PR)(CO)
J23	2010	E. Hawkes, B. An, N. M. Benbernou, H. Tanaka, S. Kim, E.D. Demaine, D. Rus and R.J. Wood	Programmable matter by folding	Proceedings of the National Academy of Sciences of the United States of America 107(28)	(PR)(CO)
J24	2010	J.L. Bredin, E.D. Demaine, M. Hajiaghayi and D. Rus	Deploying Sensor Networks with Guaranteed Fault Tolerance	IEEE/ACM Transactions on Networking 18(1)	(PR)(CO)
J25	2010	E.D. Demaine, J. Iacono and S. Langerman	Grid Vertex-Unfolding Orthostacks	International Journal of Computational Geometry and Applications 20(3)	(PR)(CO)
J26	2010	E.D. Demaine, S.P. Fekete, G. Rote, N. Schweer, D. Scymura and M. Zelke	Integer Point Sets Minimizing Average Pairwise L_1 Distance: What is the Optimal Shape of a Town?	Computational Geometry: Theory and Applications 44(2)	(PR)(CO)
J27	2010	R. Connelly, E.D. Demaine, M.L. Demaine, S. Fekete, S. Langerman, J. S. B. Mitchell, A. Ribó and G. Rote	Locked and Unlocked Chains of Planar Shapes	Discrete & Computational Geometry 44(2)	(PR)(CO)
J28	2010	P.K. Agarwal, L. Arge and K. Yi	I/O-Efficient Batched Union-Find and Its Applications to Terrain Analysis	ACM Transactions on Algorithms 7(1)	(PR)(CO)

J29	2010	P. Afshani, C. Hamilton and N. Zeh	A General Approach for Cache-Oblivious Range Reporting and Approximate Range Counting	Computational geometry: Theory and applications 43(8)	(PR)(CO)
J30	2010	J. Katajainen and S. S. Rao	A compact data structure for representing a dynamic multiset	Information Processing Letters 110(23)	(PR)(CO)
J31	2010	M.A. Bender, G.S. Brodal, R. Fagerberg, R. Jacob and E. Vicari	Optimal Sparse Matrix Dense Vector Multiplication in the I/O-Model	Theory of Computing Systems 47(4)	(PR)(CO)
J32	2010	C. Demetrescu, B. Escoffier, G. Moruz and A. Ribichini	Adapting Parallel Algorithms to the W-Stream Model, with Applications to Graph Problems	Theoretical Computer Science 411(44-46)	(PR)(CO)
J33	2011	J. E. Moeslund, L. Arge, P. K. Bøcher, B. Nygaard and J.-C. Svenning	Geographically Comprehensive Assessment of Salt-Meadow Vegetation-Elevation Relations Using LiDAR	Wetlands 31(3)	(PR)(CO)
J34	2011	B. Sandel, L. Arge, B. Dalsgaard, R. Davies, K. Gaston, W. Sutherland and J.-C. Svenning	The influence of Late Quaternary climate-change velocity on species endemism	Science 334	(PR)(CO)
J35	2011	B. Dalsgaard, E. Magård, J. Fjeldså, A.M. Martín González, C. Rahbek, J. Olesen, J. Ollerton, R. Alarcón, A.C. Araujo, P.A. Cotton, C. Lara, C.G. Machado, I. Sazima, M. Sazima, A. Timmermann, S. Watts, B. Sandel, W. Sutherland and J.-C. Svenning	Specialization in Plant-Hummingbird Networks Is Associated with Species Richness, Contemporary Precipitation and Quaternary Climate-Change Velocity	PLoS ONE 6	(PR)(CO)
J36	2011	B. Sandel, M. Krupa and J. Corbin	Using plant functional traits to guide restoration: A case study in California coastal grassland	Ecosphere 2	(PR)(CO)
J37	2011	P. Afshani, C. Hamilton and N. Zeh	Cache-Oblivious Range Reporting With Optimal Queries Requires Superlinear Space	Discrete & Computational Geometry 45(4)	(PR)(CO)
J38	2011	G.S. Brodal, B. Gfeller, A.G. Jørgensen and P. Sanders	Towards Optimal Range Medians	Theoretical Computer Science 412(24)	(PR)(CO)
J39	2011	M. Kutz, G.S: Brodal, K. Kaligosi and I. Katriel	Faster Algorithms for Computing Longest Common Increasing Subsequences	Journal of Discrete Algorithms 9(4)	(PR)(CO)
J40	2011	M.A. Bender, G.S. Brodal, R. Fagerberg, D. Ge, S. He, H. Hu, J. Iacono and A. López-Ortiz	The Cost of Cache-Oblivious Searching	Algorithmica 61(2)	
J41	2011	H.L. Chan, T.W. Lam, L.K. Lee and H.F. Ting	Approximating frequent items in asynchronous data stream over a sliding window	Algorithmica 4(3)	(PR) (CO)

J42	2011	C. Daskalakis, R. M. Karp, E. Mossel, S. Riesenfeld and E. Verbin	Sorting and Selection in Posets	SIAM Journal of Computing	(PR)(CO)
J43	2011	M. A. Abam and M. de Berg	Kinetic Spanners in R^d	Discrete & Computational Geometry 45(4)	(PR)(CO)
J44	2011	M. A. Abam, M. de Berg, M. Farshi, J. Gudmundsson and M. H. M. Smid	Geometric Spanners for Weighted Point Sets	Algorithmica 61(1)	(PR)(CO)
J45	2011	M. A. Abam, P. K. Agarwal, M. de Berg and H. Yu	Out-of-Order Event Processing in Kinetic Data Structures	Algorithmica 60(2)	(PR)(CO)
J46	2011	J. Freixas, X. Molinero, M. Olsen and M. J. Serna	On the Complexity of Problems on Simple Games	RAIRO - Operations Research 45(4)	(PR)(CO)
J47	2011	A. Beckman, U. Meyer, P. Sanders and J. Singler	Energy-Efficient Sorting using Solid State Disks	Sustainable Computing: Informatics and Systems 1(2)	(PR)(CO)
J48	2011	E. D. Demaine, S. P. Fekete, G. Rote, N. Schweer, D. Schymura and M. Zelke	Integer Point Sets Minimizing Average Pairwise L1 Distance: What is the Optimal Shape of a Town?	Computational Geometry: Theory and Applications 44(2)	(PR)(CO)
J49	2011	B. An, N. Benbernou, E. D. Demaine and D. Rus	Planning to Fold Multiple Objects from a Single Self-Folding Sheet	Robotica 29(1)	(PR)(CO)
J50	2011	G. Aloupis, S. Collette, M. Damian, E. D. Demaine, R. Flatland, S. Langerman, J. O'Rourke, V. Pinciu, S. Ramaswami, V. Sacristan and S. Wuhrer	Efficient constant-velocity reconfiguration of crystalline robots	Robotica 29(1)	(PR)(CO)
J51	2011	E. D. Demaine, M. L. Demaine, V. Hart, G. N. Price and T. Tachi	(Non)existence of Pleated Folds: How Paper Folds Between Creases	Graphs and Combinatorics 27(3)	(PR)(CO)
J52	2011	E. D. Demaine, M. L. Demaine, V. Hart, J. Iacono, S. Langerman and J. O'Rourke	Continuous Blooming of Convex Polyhedra	Graphs and Combinatorics 27(3)	(PR)(CO)
J53	2011	J. Cardinal, E. D. Demaine, M. L. Demaine, S. Imahori, T. Ito, M. Kiyomi, S. Langerman, R. Uehara and T. Uno	Algorithmic Folding Complexity	Graphs and Combinatorics 27(3)	(PR)(CO)
J54	2011	K. C. Cheung, E. D. Demaine, J. Bachrach and S. Griffith	Programmable Assembly With Universally Foldable Strings (Moteins)	IEEE Transactions on Robotics 27(4)	(PR)(CO)
J55	2011	G. Aloupis, P. Bose, E. D. Demaine, S. Langerman, H. Meijer, M. Overmars and G. T. Toussaint	Computing Signed Permutations of Polygons	International Journal of Computational Geometry and Applications 21(1)	(PR)(CO)
J56	2011	T. Ito, E. D. Demaine, N. J. A. Harvey, C. H. Papadimitriou, M. Sideri, R. Uehara and Y. Uno	On the Complexity of Reconfiguration Problems	Theoretical Computer Science 412(12-14)	(PR)(CO)
J57	2011	H. Ahn, S. Bae, E. D. Demaine, M. L. Demaine, S. Kim, M. Korman, I. Reinbacher and W. Son	Covering points by disjoint boxes with outliers	Computational Geometry: Theory and Applications 44(3)	(PR)(CO)

J58	2011	J. Cardinal, E. D. Demaine, S. Fiorini, G. Joret, S. Langerman, I. Newman and O. Weimann	The Stackelberg Minimum Spanning Tree Game	Algorithmica 59(2)	(PR)(CO)
J59	2011	H. Haverkort and F. van Walderveen	Four-Dimensional Hilbert Curves for R-Trees	Journal of Experimental Algorithmics 16	(PR)(CO)
J60	2012	B. Sandel and J. Corbin	Scale and diversity following manipulation of productivity and disturbance in Californian coastal grasslands.	Journal of Vegetation Science 23(5)	(PR)(CO)(OA)
J61	2012	M. Schleuning, J. Fründ, A-M. Klein, S. Abrahamczyk, R. Alarcón, M. Albrecht, G.K.S. Andersson, S. Bazarian, K. Böhning-Gaese, R. Bommarco, B. Dalsgaard, D.M. Dehling, A. Gotlieb, M. Hagen, T. Hickler, A. Holzschuh, C.N. Kaiser-Bunbury, H. Kreft, R.J. Morris, B. Sandel, W.J. Sutherland, J-C. Svenning, T. Tscharntke, S. Watts, C.N. Weiner, M. Werner, N.M. Williams, C. Winqvist, C.F. Dormann and N. Blüthgen	Specialization of Mutualistic Interaction Networks Decreases toward Tropical Latitudes	Current Biology 22(20)	(PR)(CO)(OA)
J62	2012	B. Sandel and E. Dangremond	Climate change and the invasion of California by grasses	Global Change Biology 18(1)	(PR)(CO)(OA)
J63	2012	P. Afshani, P. K. Agarwal, L. Arge, K. G. Larsen and J. M. Phillips	(Approximate) Uncertain Skylines	Theory of Computing Systems 52(3)	(PR)(CO)(OA)
J64	2012	P. K. Agarwal, L. Arge, H. Kaplan, E. Molad, R. E. Tarjan and K Yi	An Optimal Dynamic Data Structure for Stabbing-Semigroup Queries	SIAM Journal on Computing 41(1)	(PR)(CO)(OA)
J65	2012	L. Arge, G.S. Brodal and S. S. Rao	External memory planar point location with logarithmic updates	Algorithmica 63(1-2)	(PR)(CO)(OA)
J66	2012	G. S. Brodal, P. Davoodi and S. S. Rao	On Space Efficient Two Dimensional Range Minimum Data Structures	Algorithmica 63(4)	(PR)(CO)(OA)
J67	2012	G.S. Brodal, G. Moruz and A. Negoescu	OnlineMin: A Fast Strongly Competitive Randomized Paging Algorithm	Theory of Computing Systems 56(1)	(PR)(OA)
J68	2012	H.L. Chan, T.W. Lam, L.K. Lee and H.F. Ting	Continuous monitoring of distributed data streams over a time-based sliding window	Algorithmica 62(3-4)	(PR)(CO)(OA)
J69	2012	G. Cormode, S. Muthukrishnan, K. Yi and Q. Zhang	Continuos sampling from distributed streams	Journal of the ACM 59(2)	(PR)(CO)(OA)
J70	2012	U. Meyer and N. Zeh	I/O-efficient shortest path algorithms for undirected graphs with random and bounded edge lengths	ACM Transactions on algorithms 8(3)	(PR)(CO)(OA)

J71	2012	F. Gieseke, G. Moruz and J. Vahrenhold	Resilient K-d Trees: K-Means in Space Revisited.	Frontiers of Computer Science 6(2)	(PR)(CO)(OA)
J72	2012	E.D. Demaine, M. Hajiaghayi, H. Mahini and M. Zadimoghaddam	The Price of Anarchy in Network Creation Games	ACM Transactions on Algorithms 8(2)	(PR)(CO)(OA)
J73	2012	O. Aichholzer, F. Aurenhammer, E.D. Demaine, F. Hurtado, P. Ramos and J. Urrutia	On k-convex polygons	Computational Geometry: Theory and Applications 45(3)	(PR)(CO)(OA)
J74	2012	T.G. Abbott, Z. Abel, D. Charlton, E.D. Demaine, M.L. Demaine and S.D. Kominers	Hinged Dissections Exist	Discrete & Computational Geometry 47(1)	(PR)(CO)(OA)
J75	2012	M. Greve, A.M. Lykke, C.W. Fagg, J. Bogaert, I. Friis, R. Marchant, A.R. Marshall, J. Ndayishimiye, B. Sandel, C. Sandom, M. Schmidt, J.R. Timberlake, J.J. Wieringa, G. Zizka and J.-C. Svenning	Continental-scale variability in browser diversity is a major driver of diversity patterns in acacias across Africa	Journal of Ecology 100	(PR)(CO)(OA)
J76	2012	R. Gupta, P. Indyk, E. Price and Y. Rachlin	Compressive Sensing with Local Geometric Features	International Journal of Computational Geometry and Applications 22(4)	(PR)(CO)(OA)
J77	2012	D. Charlton, E.D. Demaine, M.L. Demaine, V. Dujmovic, P. Morin and R. Uehara	Ghost Chimneys	International Journal of Computational Geometry and Applications 22(3)	(PR)(CO)(OA)
J78	2012	E.D. Demaine, M.L. Demaine and R. Uehara	Any Monotone Boolean Function Can Be Realized by Interlocked Polygons	Algorithms 5(1)	(PR)(CO)(OA)
J79	2012	E.D. Demaine and M. Zadimoghaddam	Constant Price of Anarchy in Network-Creation Games via Public-Service Advertising	Internet Mathematics 8(1-2)	(PR)(OA)
J80	2012	L. Moll, S. Tazari and M. Thurley	Computing hypergraph width measures exactly	Information Processing Letters 112(6)	(PR)(CO)(OA)
J81	2012	S. Tazari	Faster approximation schemes and parameterized algorithms on (odd-) H-minor-free graphs	Theoretical Computer Science 417	(PR)(OA)
J82	2012	D. Wu, G. Cong and C. S. Jensen	A Framework for Efficient Spatial Web Object Retrieval	VLDB Journal 21(6)	(PR)(CO)(OA)
J83	2012	D. Wu, M. L. Yiu, G. Cong and C. S. Jensen	Joint Top-K Spatial Keyword Query Processing	IEEE Transaction on Knowledge and Data Engineering 24(10)	(PR)(CO)(OA)
J84	2012	X. Cao, G. Cong, B. Cui, C. S. Jensen and Q. Yuan	Approaches to Exploring Category Information for Question Retrieval in Community Question Answer Archives	ACM Transactions on Information Systems 30(2)	(PR)(CO)(OA)
J85	2012	M. Yiu, L., I. Assent, C. S. Jensen and P. Kalnis	Outsourced Similarity Search on Metric Data Assets	IEEE Transactions on Knowledge and Data Engineering 24(2)	(PR)(CO)(OA)
J86	2012	X. Cao, G. Cong, C. S. Jensen, J. J. Ng, B. C. Ooi, N.-T. Phan and and D. Wu	SWORS: A System for the Efficient Retrieval of Relevant Spatial Web Objects	Proceedings of the VLDB Endowment 5(12)	(PR)(CO)(OA)

J87	2013	J.E. Moeslund, L. Arge, P.K. Bøcher, T. Dalgaard, R. Ejrnæs, M.V. Odgaard and J.-C. Svenning	Topographically controlled soil moisture drives plant diversity patterns within grasslands	Biodiversity and Conservation 22(10)	(PR)(CO)(OA)
J88	2013	J.E. Moeslund, L. Arge, P.K. Bøcher, T. Dalgaard and J.-C. Svenning	Topography as a driver of local terrestrial vascular plant diversity patterns	Nordic Journal of Botany 31(2)	(PR)(CO)(OA)
J89	2013	J.E. Moeslund, L. Arge, P.K. Bøcher, T. Dalgaard, M.V. Odgaard, B. Nygaard and J.-C. Svenning	Topographically controlled soil moisture is the primary driver of local vegetation patterns across a lowland region	Ecosphere 4(7)	(PR)(CO)(OA)
J90	2013	C. Alexander, J.E. Moeslund, P.K. Bøcher, L. Arge and J.-C. Svenning	Airborne laser scanner (LiDAR) proxies for understory light conditions	Remote Sensing of Environment 134	(PR)(CO)(OA)
J91	2013	C. Sandom, L. Dalby, C. Fløjgaard, W.D. Kissling, J. Lenoir, B. Sandel, K. Trøjelsgaard, R. Ernæs and J.-C. Svenning	Mammal predator and prey species richness are strongly linked at macroscales	Ecology 94(5)	(PR)(CO)(OA)
J92	2013	B. Dalsgaard, K. Trøjelsgaard, A.M. Martin González, D. Nogués-Bravo, J. Ollerton, T. Petanidou, B. Sandel, M. Schleuning, Z. Wang, C. Rahbek, W.J. Sutherland, J.-C. Svenning and J.M. Olesen	Historical climate-change influences modularity of pollination networks	Ecography 36(12)	(PR)(CO)(OA)
J93	2013	J.-C. Svenning and B. Sandel	Disequilibrium vegetation dynamics under future climate change	American Journal of Botany	(PR)(OA)
J94	2013	A.B. Smith, B. Sandel, N.J.B. Kraft and S. Carey	Characterizing scale-dependent community assembly using the functional-diversity-area relationship	Ecology 94(11)	(PR)(CO)(OA)
J95	2013	B. Sandel and J.-C. Svenning	Human impacts drive a global topographic signature in tree cover	Nature Communications 4	(PR)(OA)
J96	2013	M. Olsen and M. Revsbæk	Alliance Partitions and Bisection Width for Planar Graphs	Journal of Graph Algorithms and Applications 17(6)	(PR)(OA)
J97	2013	P.K. Agarwal, L. Arge, S. Govindarajan, J. Yang and K. Yi	Efficient external memory structures for range-aggregate queries	Computational Geometry: Theory and Application 46(3)	(PR)(CO)(OA)
J98	2013	A. Sand, G.S. Brodal, R. Fagerberg, C.N.S. Pedersen and T. Mailund	A practical O(n log n) time algorithm for computing the triplet distance on binary trees	BMC Bioinformatics 14	(PR)(CO)(OA)
J99	2013	G.S. Brodal, M. Greve, V. Pandey and S.S. Rao	Integer Representations towards Efficient Counting in the Bit Probe Model	Journal of Discrete Algorithms	(PR)(CO)(OA)
J100	2013	A. Sand, M.K. Holt, J. Johansen, R. Fagerberg, G.S. Brodal, C.N.S. Pedersen and T. Mailund	Algorithms for Computing the Triplet and Quartet Distances for Binary and General Trees	MDPI Biology - Special Issue on Developments in Bioinformatic Algorithms 2(4)	(PR)(CO)(OA)

J101	2013	K. Yi and Q. Zhang	Optimal Tracking of Distributed Heavy Hitters and Quantiles	Algorithmica 65(1)	(PR)(CO)(OA)
J102	2013	P.K. Agarwal, G. Cormode, Z. Huang, J.M. Phillips, Z. Wei and K. Yi.	Mergeable Summaries	ACM Transactions on Database Systems 38(4)	(PR)(CO)(OA)
J103	2013	R. Pagh, Z. Wei, K. Yi and Q. Zhang	Cache-Oblivious Hashing	Algorithmica	(PR)(CO)(OA)
J104	2013	U. Meyer and V. Weichert	Algorithm Engineering für moderne Hardware	Informatik-Spektrum	(PR)(OA)
J105	2013	X. Li, V. Ceikute, C.S. Jensen and K.-L. Tan	Effective Online Group Discovery in Trajectory Databases	IEEE Transactions on Knowledge and Data Engineering 25(12)	(PR)(CO)(OA)
J106	2013	M. Kaul, R.C.-W. Wong, B. Yang and C.S. Jensen	Finding Shortest Paths on Terrains by Killing Two Birds with One Stone	Proceedings of the VLDB Endowment 7(1)	(PR)(CO)(OA)
J107	2013	K. S. Bøgh, A. Skovsgaard and C.S. Jensen	GroupFinder: A New Approach to Top-K Point-of-Interest Group Retrieval	Proceedings of the VLDB Endowment 6(12)	(PR)(CO)(OA)
J108	2013	B. Yang, C. Guo and C.S. Jensen	Travel Cost Inference from Sparse, Spatio-Temporally Correlated Time Series Using Markov Models	Proceedings of the VLDB Endowment 6(9)	(PR)(CO)(OA)
J109	2013	D. Wu, M.L. Yiu and C.S. Jensen	Moving Spatial Keyword Queries: Formulation, Methods, and Analysis	ACM Transactions on Database Systems 38(1)	(PR)(CO)(OA)
J110	2013	L. Chen, G. Cong, C.S. Jensen and D. Wu	Spatial Keyword Query Processing: An Experimental Evaluation	Proceedings of the VLDB Endowment 6(3)	(PR)(CO)(OA)
J111	2013	K. Tzoumas, A. Deshpande and C.S. Jensen	Efficiently Adapting Graphical Models for Cardinality Estimation	The VLDB Journal 22(1)	(PR)(CO)(OA)
J112	2013	B. Ballinger, N. Benbernou, P. Bose, M. Damian, E.D. Demaine, V. Dujmovic, R. Flatland, F. Hurtado, J. Iacono, A. Lubiw, P. Morin, V. Sacristan, D. Souvaine and R. Uehara	Coverage with k-Transmitters in the Presence of Obstacles	Journal of Combinatorial Optimization 25(2)	(PR)(CO)(OA)
J113	2013	S. Butler, E.D. Demaine, R. Graham and T. Tachi	Constructing Points through Folding and Intersection	International Journal of Computational Geometry and Applications 23(1)	(PR)(CO)(OA)
J114	2013	G. Barequet, N. Benbernou, D. Charlton, E.D. Demaine, M.L. Demaine, M. Ishaque, A. Lubiw, A. Schulz, D.L. Souvaine, G.T. Toussaint and A. Winslow	Bounded-Degree Polyhedronization of Point Sets	Computational Geometry: Theory and Applications 46(2)	(PR)(CO)(OA)
J115	2013	J. Cardinal, E.D. Demaine, S. Fiorini, G. Joret, I. Newman and O. Weimann	The Stackelberg Minimum Spanning Tree Game on Planar and Bounded-Treewidth Graphs	Journal of Combinatorial Optimization 25(1)	(PR)(CO)(OA)
J116	2013	G. Aloupis, J. Cardinal, S. Collette, E.D. Demaine, M.L. Demaine, M. Dulieu, R. Fabila-Monroy, V. Hart, F. Hurtado, S. Langerman, M. Saumell, C. Seara and P. Taslakian	Non-crossing matchings of points with geometric objects	Computational Geometry: Theory and Applications 46(1)	(PR)(CO)(OA)

J117	2013	N. Alon, E.D. Demaine, M. Hajiaghayi and T. Leighton	Basic Network Creation Games	SIAM Journal on Discrete Mathematics 27(2)	(PR)(CO)(OA)
J118	2013	E.D. Demaine, S. Eisenstat, M. Ishaque and A. Winslow	One-Dimensional Staged Self-Assembly	Natural Computing 12(2)	(PR)(CO)(OA)
J119	2013	E.D. Demaine, M.L. Demaine, J. Itoh, A. Lubiw, C. Nara and J. O'Rourke	Refold Rigidity of Convex Polyhedra	Computational Geometry: Theory and Applications 46(8)	(PR)(CO)(OA)
J120	2013	G. Aloupis, N. Benbernou, M. Damian, E.D. Demaine, R. Flatland, J. Iacono and S. Wuhrer	Efficient Reconfiguration of Lattice-Based Modular Robots	Computational Geometry: Theory and Applications 46(8)	(PR)(CO)(OA)
J121	2013	Z. Abel, E.D. Demaine, M.L. Demaine, S. Eisenstat, J. Lynch and T.B. Schardl	Finding a Hamiltonian Path in a Cube with Specified Turns is Hard	Journal of Information Processing 21(3)	(PR)(CO)(OA)
J122	2013	E.D. Demaine, M. Ghodsi, M. Hajiaghayi, A.S. Sayedi-Roshkhar and M. Zadimoghaddam	Scheduling to Minimize Gaps and Power Consumption	Journal of Scheduling 16(2	(PR)(CO)(OA)
J123	2013	Z. Abel, E.D. Demaine, M.L. Demaine, S. Eisenstat, J. Lynch, T.B. Schardl and I. Shapiro-Ellowitz	Folding Equilateral Plane Graphs	International Journal of Computational Geometry and Applications 23(2)	(PR)(CO)(OA)
J124	2013	M. Bateni, M. Hajiaghayi and M. Zadimoghaddam	Submodular secretary problem and extensions	ACM Transactions on Algorithms 9(4)	(PR)(CO)(OA)
J125	2013	A. Elmasry, A. Farzan and J. Iacono	On the hierarchy of distribution-sensitive properties for data structures	Acta Informatica 50(4)	(PR)(CO)(OA)
J126	2013	P. Afshani	Improved pointer machine and I/O lower bounds for simplex range reporting and related problems	International Journal of Computational Geometry and Applications 23 (4-5)	(PR)(OA)
J127	2014	C. Alexander, P.K. Bøcher, L. Arge and J.-C. Svenning	Regional-scale mapping of tree cover, height and main phenological tree types using airborne laser scanning data	Remote Sensing of Environment 147	(PR)(CO)(OA)
J128	2014	M. Schleuning, L. Ingmann, R. Strauß, S. Fritz, B. Dalsgaard, D.M. Dehling, M. Plein, F.V. Saavedra, B. Sandel, J.-C. Svenning, K. Böhning-Gaese and C.F. Cormann	Ecological, historical and evolutionary determinants of modularity in weighted seed-dispersal networks	Ecology Letters 17(4)	(PR)(CO)(OA)
J129	2014	G. Feng, X.C. Mi, P.K. Bøcher, L.F. Mao, B. Sandel, M. Cao, W.H. Ye, Z.Q. Hao, H.D. Gong, Y.T. Zhang, X.H. Zhao, G.Z. Jin, K.P. Ma and J.-C. Svenning	Relative roles of local disturbance, current climate and palaeoclimate in determining phylogenetic and functional diversity in Chinese forests	Biogeosciences 11	(PR)(CO)(OA)
J130	2014	R. Ø. Pedersen, B. Sandel and J.-C. Svenning	Macroecological evidence for competitive regional-scale interactions between the two major clades of mammal carnivores (Feliformia and Caniformia)	PLoS ONE 9(6)	(PR)(CO)(OA)

J131	2014	Dalsgaard, B., D.W. Carstensen, J. Fjeldså, P.K. Maruyama, C. Rahbek, B. Sandel, J. Sonne, J.-C. Svenning, Z. Wang and W.J. Sutherland	Does geography, current climate or historical climate determine bird species richness, endemism and island network roles in Wallacea and the West Indies?	Ecology and Evolution 4(20)	(PR)(CO)(OA)
J132	2014	J.Y. Barnagaud, W.D. Kissling, B. Sandel, W. Eiserhardt, H. Balslev, C.H. Sekercioglu, B. Enquist, C. Tsirogiannis and J.-C. Svenning	Ecological traits influence the phylogenetic structure of bird species co-occurrences worldwide	Ecology Letters 17(7)	(PR)(CO)(OA)
J133	2014	T. Amano, B. Sandel, H. Eager, E. Bulteau, J.-C. Svenning, B. Dalsgaard, C. Rahbek, R.G. Davies and W.J. Sutherland	Global distribution and drivers of language extinction risk	Proceedings of the Royal Academy of Science B: Biological Sciences 281(1793)	(PR)(CO)(OA)
J134	2014	C. Lamanna, B. Blonder, C. Violle, N.J.B. Kraft, B. Sandel, I. Simova, J. Donoghue, J.-C. Svenning, B. McGill, B. Boyle, S. Dolins, P.M. Jørgensen, A. Marcuse-Kubitza, N. Morueta-Holme, R.K. Peet, W.H. Piel, J. Regetz, M. Schildhauer, N. Spencer, B. Theirs, S.K. Wiser and B.J. Enquist	The latitudinal species richness gradient does not arise from a larger functional trait space in the tropics	Proceedings of the National Academy of Sciences 111(38)	(PR)(CO)(OA)
J135	2014	C. Tsirogiannis and B. Sandel	Computing the Skewness of the Phylogenetic Mean Pairwise Distance in Linear Time	Algorithms for Molecular Biology 9(15)	(PR)(OA)
J136	2014	D. Sidlauskas, S. Saltenis and C.S. Jensen	Processing of Extreme Moving-Object Update and Query Workloads in Main Memory	The VLDB Journal 23(5)	(PR)(CO)(OA)
J137	2014	T.M. Chan, S. Durocher, K.G. Larsen, J. Morrison and B.T. Wilkinson	Linear-Space Data Structures for Range Mode Query in Arrays	Theory of Computing Systems 55(4)	(PR)(CO)(OA)
J138	2014	K.G. Larsen	On Range Searching in the Group Model and Combinatorial Discrepancy	SIAM Journal on Computing 43(2)	(PR)(OA)
J139	2014	G. Cormode and H. Jowhari	A second look at counting triangles in graph streams	Theoretical Computer Science 552	(PR)(CO)(OA)
J140	2014	G. S. Brodal, A. C. Kaporis, A. N. Papadopoulos, S. Sioutas, K. Tsakalidis and K. Tsichlas	Dynamic 3-sided planar range queries with expected doubly-logarithmic time	Theoretical Computer Science 526	(PR)(CO)(OA)
J141	2014	A. Sand, M.K. Holt, J. Johansen, G.S. Brodal, T. Mailund and C.N.S. Pedersen	tqDist: A Library for Computing the Quartet and Triplet Distances Between Binary or General Trees	Bioinformatics 30(14)	(PR)(CO)(OA)
J142	2014	K. Yi, L. Wang and Z. Wei	Indexing for Summary Queries: Theory and Practice	ACM Transactions on Database Systems	(PR)(CO)(OA)
J143	2014	M. Abam, S. Daneshpajouh, L. Deleuran, S. Ehsani and M. Ghodsi	Computing Homotopic Line Simplification in a Plane	Computational Geometry: Theory and Applications 47(7)	(PR)(CO)

J144	2014	S. Shang, R. Ding, K. Zheng, C.S. Jensen, P. Kalnis and X. Zhou	Personalized Trajectory Matching in Spatial Networks	The VLDB Journal 23(3)	(PR)(CO)
J145	2014	B. Yang, B., M. Kaul and C.S. Jensen	Using Incomplete Information for Complete Weight Annotation of Road Networks	IEEE Transactions on Knowledge and Data Engineering 26(5)	(PR)(CO)(OA)
J146	2014	G. Moruz, A. Negoescu, C.Neumann and V. Weichert	Engineering Efficient Paging Algorithms	Journal of Experimental Algorithmics 19	(PR)(CO)(OA)
J147	2014	E. D. Demaine, M. Hajiaghayi and D. Marx	Minimizing Movement: Fixed-Parameter Tractability	ACM Transactions on Algorithms 11(2)	(PR)(CO)(OA)
J148	2014	E. D. Demaine, M. L. Demaine, R. Uehara, T. Uno and Y. Uno	UNO is hard, even for a single player	Theoretical Computer Science 521	(PR)(CO)(OA)
J149	2014	M. Damian, E. D. Demaine and R. Flatland	Unfolding Orthogonal Polyhedra with Quadratic Refinement: The Delta-Unfolding Algorithm	Graphs and Combinatorics 30(1)	(PR)(CO)(OA)
J150	2014	G. Borradaile, E. D. Demaine and S.Tazari	Polynomial-Time Approximation Schemes for Subset-Connectivity Problems in Bounded-Genus Graphs	Algorithmica 68(2)	(PR)(CO)(OA)
J151	2014	G. S. Brodal, M. Greve, V. Pandey and S. S. Satti	Integer representations towards efficient counting in the bit probe model	Journal of Discrete Algorithms 26	(PR)(CO)(OA)
J152	2014	Sandom, C., S. Faurby, B. Sandel, J.-C. Svenning	Global Late Quaternary megafauna extinctions linked to humans, not climate change.	Proceedings of the Royal Society B: Biological Sciences 281(1787)	(PR)(CO)(OA)
J153	2014	Kissling, D., L. Dalby, C. Fløjgaard, J. Lenoir, B. Sandel, C. Sandom, K. Trøjelsgaard, J.-C. Svenning.	Establishing macroecological trait datasets: digitalization, extrapolation and validation of diet preferences in terrestrial mammals worldwide	Ecology and Evolution 4(14)	(PR)(CO)(OA)
J154	2014	H.-K. Ahn, H.-S. Kim, S.-S. Kim and W. Son	Computing k Centers over Streaming Data for Small k	International Journal of Computational Geometry and Applications 24(2)	(PR)(CO)(OA)
J155	2014	T. Jurkiewicz and K. Mehlhorn	On a Model of Virtual Address Translation	Journal of Experimental Algorithmics 19	(PR)(CO)(OA)
J156	2014	A. C. Gilbert, P. Indyk, M. Iwen and L. Schmidt	Recent Developments in the Sparse Fourier Transform: A compressed Fourier transform for big data	Signal Processing Magazine 31(5)	(PR)(CO)(OA)
J157	2014	S. Felton, M. Tolley, E. Demaine, D. Rus and R. Wood	A method for building self-folding machines	Science 345(6197)	(PR)(CO)(OA)
J158	2014	E. D. Demaine, M. L. Demaine, Y. N. Minsky, J. S. B. Mitchell, R. L. Rivest and M. Patrascu	Picture-Hanging Puzzles	Theory of Computing Systems 54(4)	(PR)(CO)(OA)

J159	2014	O. Aichholzer, G. Aloupis, E. D. Demaine, M. L. Demaine, S. P. Fekete, M. Hoffmann, A. Lubiw, J. Snoeyink and A. Winslow	Covering Folded Shapes	Journal of Computational Geometry 5(1)	(PR)(CO)(OA)
J160	2014	E. D. Demaine, Y. Okamoto, R. Uehara and Y. Uno	Computational complexity and an integer programming model of Shakashaka	IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences 97-A(6)	(PR)(CO)(OA)
J161	2014	Z. Abel, E. D. Demaine, M. L. Demaine, T. Horiyama and R. Uehara	Computational Complexity of Piano-Hinged Dissections	IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences 97-A(6)	(PR)(CO)(OA)
J162	2014	T. Ito and E. D. Demaine	Approximability of the Subset Sum Reconfiguration Problem	Journal of Combinatorial Optimization 28(3)	(PR)(CO)(OA)
J163	2015	W. Son, H.-K. Ahn and S. W. Bae	Group Nearest-Neighbor Queries in the L_1 Plane	Theoretical Computer Scienc 592	(PR)(CO)(OA)
J164	2015	G. S. Brodal, S. Sioutas, K. Tsichlas and C. Zaroliagis	D^2-Tree: A New Overlay with Deterministic Bounds	Algorithmica 72(3)	(PR)(CO)(OA)
J165	2015	S. Pettie and H.-H. Su	Distributed Coloring Algorithms for Triangle-Free Graphs	Information and Computation 243	(PR)(OA)
J166	2015	S. Pettie	Sensitivity Analysis of Minimum Spanning Trees in Sub-Inverse-Ackermann Time	Journal of Graph Algorithms and Applications 19(1)	(PR)(OA)
J167	2015	S. Pettie	Three Generalizations of Davenport-Schinzel Sequences	SIAM Journal on Discrete Mathematics 29(4)	(PR)(OA)
J168	2015	E. Sebastián-González, B. Sandel, B. Dalsgaard and P. Guimarães	Macroecological trends in nestedness and modularity of seed-dispersal networks.	Global Ecology and Biogeography 24(3)	(PR)(CO)(OA)
J169	2015	K. Engemann, B. Enquist, B. Sandel, B. Boyle, P. Jørgensen, N. Morueta-Holme, R. Peet, C. Violle and J.-C. Svenning	Limited sampling hampers 'big data' estimation of species richness in a tropical biodiversity hotspot.	Ecology and Evolution, 5(3)	(PR)(CO)(OA)
J170	2015	B. Sandel	Towards a taxonomy of spatial scale-dependence	Ecography 38(4)	(PR)
J171	2015	T. M. Chan, S. Durocher, M. Skala and B. T. Wilkinson	Linear-Space Data Structures for Range Minority Query in Arrays	Algorithmica 72(4)	(PR)(CO)(OA)
J172	2015	K. G. Larsen, J. I. Munro, J. S. Nielsen and S. Thankachan	On Hardness of Several String Indexing Problems	Theoretical Computer Science 582	(PR)(CO)(OA)
J173	2015	A. Kovacs, U. Meyer, G. Moruz and A. Negoescu	The optimal structure of algorithms for alpha-paging.	Information Processing Letters, 115(12)	(PR)(OA)
J174	2015	A. Termehchy, A. Vakilian, Y. Chodpathumwan and M. Winslett	Cost-Effective Database Design For Information Extraction	ACM Transactions on Database Systems 40(2)	(PR)(CO)(OA)
J175	2015	E. D. Demaine, J. Iacono and S. Langerman	Worst-Case Optimal Tree Layout in External Memory	Algorithmica 72(2)	(PR)(CO)(OA)

J176	2015	B. Blonder, D. Nogués-Bravo, M.K. Borregaard, J. Donoghue II, P.M. Jørgensen, N.J.B. Kraft, J.-P. Lessard, N. Morueta-Holme, B. Sandel, J.-C. Svenning, C. Violle, C. Rahbek and B.J. Enquist	Linking environmental filtering and disequilibrium to biogeography with a community climate framework	Ecology 96(4)	(PR)(CO)
J177	2015	B. Sandel, A.G. Gutiérrez, P.B. Reich, F. Schrodt, J. Dickie and J. Kattge	Estimating the missing species bias in plant trait measurements	Journal of Vegetation Science 26(5)	(PR)(CO)
J178	2015	Sandel, B., A.G. Gutiérrez, P.B. Reich, F. Schrodt, J. Dickie and J. Kattge	Late Cenozoic climate change and the phylogenetic structure of regional conifer floras worldwide	Global Ecology and Biogeography 24(10)	(PR)(CO)
J179	2015	J-C. Svenning, W. Eiserhardt, S. Normand, A. Ordonez and B. Sandel	The influence of paleoclimate on present-day patterns in biodiversity and ecosystems.	Annual Reviews in Ecology, Evolution and Systematics 46	(PR)(CO)(OA)
J180	2015	M. Pasgaard, N. Strange, B. Dalsgaard, P.K.M. Mendonça and B. Sandel	Geographical imbalances and divides in the scientific production of climate change knowledge	Global Environmental Change 35	(PR)(CO)(OA)
J181	2015	L. Arge and M. Thorup	RAM-efficient External Memory Sorting	Algoritmica 73(4)	(PR)(CO)(OA)
J182	2015	G. S. Brodal, G. Moruz and A. Negoescu	OnlineMin: A Fast Strongly Competitive Randomized Paging Algorithm,	Theory of Computing Systems 56(1)	(PR)(OA)
J183	2015	J. Brody and K. G. Larsen	Adapt or Die: Polynomial Lower Bounds for Non-Adaptive Dynamic Data Structures	Theory of Computing 11(19)	(PR)(CO)(OA)
J184	2015	P. Wollstadt, U. Meyer, and M. Wibral	A Graph Algorithmic Approach to Separate Direct from Indirect Neural Interactions	PLoS ONE, 10(10)	(PR)(CO)(OA)
J185	2015	C. Hegde, P. Indyk and L. Schmidt	Approximation Algorithms for Model-Based Compressive Sensing	IEEE Transactions of Information Theory 61(9)	(PR)(CO)(OA)
J186	2015	E. D. Demaine, F. Ma, M. Susskind and E. Waingarten	You Should Be Scared of German Ghost	Journal of Information Processing 23(3)	(PR)(CO)(OA)
J187	2015	G. Aloupis, E. D. Demaine, A. Guo and G. Viglietta	Classic Nintendo Games are (Computationally) Hard	Theoretical Computer Science 586	(PR)(CO)(OA)
J188	2015	K. Yamanaka, E. D. Demaine, T. Ito, J. Kawahara, M. Kiyomi, Y. Okamoto, T. Saitoh, A. Suzuki, K. Uchizawa and T. Uno	Swapping Labeled Tokens on Graphs	Theoretical Computer Science 586	(PR)(CO)(OA)
J189	2015	A. B. Adcock, E. D. Demaine, M. L. Demaine, M. P. O'Brien, F. Reidl, F. S. Villaamil and B. D. Sullivan	Zig-Zag Numberlink is NP-Complete	Journal of Information Processing 23(3)	(PR)(CO)(OA)
J190	2015	E. D. Demaine and M. L. Demaine	Fun with Fonts: Algorithmic Typography	Theoretical Computer Science 586	(PR)(OA)

J191	2015	E. D. Demaine, M. L. Demaine, E. Fox-Epstein, D. A. Hoang, T. Ito, H. Ono, Y. Otachi, R. Uehara and T. Yamada	Linear-time algorithm for sliding tokens on trees	Theoretical Computer Science 600	(PR)(CO)(OA)

Thesis

T1	2007	I. Brudaru	Heuristics for Average Diameter Approximation with External Memory Algorithms	MPI	MS Thesis
T2	2007	G. Moruz	Hardware-Aware Algorithms and Data Structures	AU	PhD Thesis
T3	2008	M. Patrascu	Lower Bound Techniques for Data Structures	MIT	PhD Thesis
T4	2008	A. Sidiropoulos	Computational metric embeddings	MIT	PhD Thesis
T5	2008	D. Ajwani	Traversing large graphs in realistic settings	MPI	PhD Thesis
T6	2008	K. Do Ba	Testing closeness of distributions under the EMD metric	MIT	MS Thesis
T7	2008	K. Lai	Complexity of Union-Split-Find Problems	MIT	MS Thesis
T8	2008	J. M. Larsen og M. Nielsen	En undersøgelse af algoritmer til løsning af generalized movers problem i 3D	AU	MS Thesis
T9	2008	C. Andersen	An optimal minimum spanning tree algorithm	AU	MS Thesis
T10	2008	M. Revsbæk	I/O-efficient Algorithms for Batched Union-Find with Dynamic Set Properties and its Applications to Hydrological Conditioning	AU	MS Thesis
T11	2008	A. H. Jensen	I/O-efficient Processing of LIDAR Data	AU	MS Thesis
T12	2009	M. Olsen	Link Building	AU	PhD Thesis
T13	2009	T. Mølhave	Handling Massive Terrains and Unreliable Memory, AU	AU	PhD Thesis
T14	2009	H. B. Kirk	Searching with Dynamic Optimality: In Theory and Practice	AU	MS Thesis
T15	2009	K. Piatkowski	Implementering og udvikling af maksimum delsum algoritmer	AU	MS Thesis
T16	2009	O. Weimann	Accelerating Dynamic Programming	MIT	PhD Thesis
T17	2009	V. Weichert	Radiation parameterization of the climate model COSMO/CLM in CUDA	FRA	MS Thesis
T18	2009	R. Berinde	Advances in Sparse Signal Recovery Methods	MIT	MS Thesis
T19	2009	P. Davoodi	Two Dimensional Range Minimum Queries	AU	MS Thesis

T20	2009	K. Tsakalidis	External Memory 3-sided Planar Range Reporting and Persistent B-Trees	AU	MS Thesis
T21	2009	L. Deleuran	Polygonal Line Simplification	AU	MS Thesis
T22	2010	A. G. Jørgensen	Data Structures: Sequence Problems, Range Queries, and Fault Tolerance	AU	PhD Thesis
T23	2010	J. Moeslund	Fine-resolution geospatial modelling of contemporary and potential future plant diversity in Denmark	AU	MS Thesis
T24	2010	J. Truelsen	Working Set Implicit Dictionaries and Range Mode Lower Bounds and Approximations	AU	MS Thesis
T25	2010	M. Greve	Online Sorted Range Reporting and Approximating the Mode	AU	MS Thesis
T26	2010	D. Kjær	Range Media Algorithms	AU	MS Thesis
T27	2010	J. Suhr Christensen	Experimental Study of Kinetic Geometric t-Spanner Algorithms	AU	MS Thesis
T28	2011	K. G. Larsen	Optimal Orthogonal Range Reporting in 3-d	AU	MS Thesis
T29	2011	C. Kejlberg-Rasmussen	On Implicit Dictionaries with the Working-Set Property and Catenable Priority Queues with Attrition	AU	MS Thesis
T30	2011	P. Davoodi	Data Structures: Range Queries and Space Efficiency	AU	PhD Thesis
T31	2011	K. Tsakalidis	Dynamic Data Structures: Orthogonal Range Queries and Update Efficiency	AU	PhD Thesis
T32	2011	J. Nelson	Sketching and Streaming High-Dimensional Vectors	MIT	PhD Thesis
T33	2012	J. E. Moeslund	The role of topography in determining local plant diversity patterns across Denmark	AU	PhD Thesis
T34	2012	F. van Walderveen	External Memory Graph Algorithms and Range Searching Data Structures	AU	PhD Thesis
T35	2012	L. Deleuran	Homotopic Polygonal Line Simplification	AU	PhD Thesis
T36	2012	C. Neumann	Practical Paging Algorithms	FRA	MS Thesis
T37	2012	D. Veith	Implementation of an External-Memory Diameter Approximation	FRA	MS Thesis
T38	2012	M. Sturmann	k-Dimensionale Orthogonale Bereichsanfragen für GPUs auf großen Instanzen	FRA	MS Thesis

T39	2012	P. Wollstadt	A Graph Algorithmic Approach to Separate Direct from Indirect Neural Interactions by Identifying Alternative Paths with Similar Weights	FRA	BS Thesis
T40	2012	E. Deza	An efficient implementation of the optimal paging algorithm	FRA	BS Thesis
T41	2012	T. Morgan	Map Folding	MIT	MS Thesis
T42	2012	R. Gupta	A Compressive Sensing Algorithm for Attitude Determination	MIT	MS Thesis
T43	2012	A. Koefoed-Hansen	Representations for Path Finding in Planar Environments	AU	MS Thesis
T44	2013	K.G. Larsen	Models and Techniques for Proving Data Structure Lower Bounds	AU	PhD Thesis (OA)
T45	2013	C. Kejlberg-Rasmussen	Dynamic Data Structures: The Interplay of Invariants and Algorithm	AU	PhD Thesis (OA)
T46	2013	J. Fogh	Engineering a Fast Fourier Transform	AU	MS Thesis (OA)
T47	2013	M. Holt and J. Johansen	Computing Triplet and Quartet Distances	AU	MS Thesis (OA)
T48	2013	J. Schou	Range Minimum Data Structures	AU	MS Thesis
T49	2013	A. Negoescu	Design of Competitive Paging Algorithms with Good Behaviour in Practice	FRA	PhD Thesis (OA)
T50	2013	D. Pick	Effiziente Algorithmen auf Eingebetteten Plattformen	FRA	MS Thesis
T51	2013	T. Timmer	I/O-effiziente Durchmesser-Approximierung auf gewichteten Graphen	FRA	MS Thesis
T52	2013	D. Frascaria	Improved results for (h,k)-paging	FRA	MS Thesis
T53	2013	S. Försch	An efficient implementation of PARTITION2	FRA	MS Thesis
T54	2013	A. Kehlenbach	Interaktive Stadtplanungsmaßnahmen auf der GPU	FRA	MS Thesis
T55	2013	S. Bechtold	Shortest Paths with Multiple Constraints in Flight Networks	FRA	MS Thesis
T56	2013	V. Ceikute	Inferring Groups of Objects, Preferred Routes, and Facility Locations from Trajectories	AU	PhD Thesis (OA)
T57	2013	E. Price	Sparse Recovery and Fourier Sampling	MIT	PhD Thesis
T58	2013	L. Schmidt	Model-Based Compressive Sensing with Earth Mover's Distance Constraints	MIT	MS Thesis
T59	2013	S. Mahabadi	Approximate Nearest Neighbor And Its Many Variants	MIT	MS Thesis

T60	2013	F. Mogensen	Locating Points of Interest Based on Geo-tagged Tweets	AU	MS Thesis
T61	2013	C.W. Schmidt	Indicering af spatio-tekstuelle data – et empirisk studie	AU	MS Thesis
T62	2014	J.M. Friis and S.B. Olesen	An Experimental Comparison of Max Flow Algorithms	AU	MS Thesis (OA)
T63	2014	D. W. Petersen	Orthogonal Range Skyline Counting Queries	AU	MS Thesis (OA)
T64	2014	J. Kunert	Hashing and Random Graphs	AU	MS Thesis (OA)
T65	2014	B. Mortensen	Algorithms for Computing Convex Hulls Using Linear Programming	AU	MS Thesis (OA)
T66	2014	M. Revsbæk	Handling Massive and Dynamic Terrain Data	AU	MS Thesis (OA)
T67	2014	A. Skovsgaard	Indexing, Query Processing, and Clustering of Spatio-Temporal Text Objects	AU	PhD Thesis
T68	2014	Samir van de Sand	Eine adaptive Tabusuche für das Vehicle Routing Problem mit Zeitfenstern	FRA	MS Thesis
T69	2014	Morteza Zadimoghaddam	Online Allocation Algorithms with Applications in Computational Advertising	MIT	PhD Thesis
T70	2015	J. Truelsen	Space Efficient Data Structures and External Terrain Algorithms	AU	PhD Thesis
T71	2015	J. Yang	Efficient Algorithms for Handling Massive Terrains	AU	PhD Thesis
T72	2015	J. S. Nielsen	Implicit Data Structures, Sorting, and Text Indexing	AU	PhD Thesis
T73	2015	C. Jespersen	Monte Carlo Evaluation of Financial Options Using a GPU	AU	MS Thesis (OA)
T74	2015	B. Mortensen	Algorithms for Computing Convex Hulls Using Linear Programming	AU	MS Thesis (OA)
T75	2015	K. V. Ebbesen	On the Practicality of Data-Oblivious Sorting	AU	MS Thesis (OA)
T76	2015	J. H. Knudsen and R. L. Pedersen	Engineering Rank and Select Queries on Wavelet Trees	AU	MS Thesis (OA)
T77	2015	J. C. C. Jensen	Event Detection in Soccer using Spatio-Temporal Data	AU	MS Thesis (OA)
T78	2015	M. E. Hougaard	On the Complexity of Red-Black Trees for Higher Dimensions	AU	MS Thesis (OA)
T79	2015	S. N. Madsen and R. Hallenberg-Larsen	Computing Set Operations on Simple Polygons Using Binary Space Partition Trees	AU	MS Thesis (OA)
T80	2015	L. Walther	Intersection of Convex Objects in the Plane	AU	MS Thesis (OA)

T81	2015	A. S-H. Vinther and M. S-H. Vinther	Pathfinding in Two-dimensional Worlds	AU	MS Thesis (OA)
T82	2015	T. Sandholt and M. B. Christensen	Geometric Measures of Depth	AU	MS Thesis (OA)
T83	2015	M. Ravn	Orthogonal Range Searching in 2D with Ball Inheritance	AU	MS Thesis (OA)
T84	2015	H. Hassanieh	The Sparse Fourier Transform: Theory & Practice	MIT	PhD Thesis
T85	2015	N. Schepsen	STXXL - Paging-Algorithmen	FRA	BS Thesis
T86	2015	D. Roß	Cohesion in scientific collaboration and citation networks	FRA	MS Thesis

Other

O1	2008	E. Demaine, B. Gassend, J. O'Rourke, and G. T. Toussaint	All Polygons Flip Finitely ... Right?	In "Surveys on Discrete and Computational Geometry: Twenty Years Later", Contemporary Mathematics 453	(CO)
O2	2008	A. Andoni and P. Indyk	Near-Optimal Hashing Algorithms for Approximate Nearest Neighbor in High Dimensions	Communications of the ACM, 51(1)	(CO)
O3	2008	K. Mehlhorn and P. Sanders	Algorithms and Data Structures: The Basic Toolbox	Springer Verlag	(CO)
O4	2009	D. Ajwani and U. Meyer	Design and Engineering of External Memory Traversal Algorithms for general graphs	In Algorithmic of Large and Complex Networks, Springer Verlag	(PR)
O5	2009	L. Arge and N. Zeh	External-memory Algorithms and Data Structures	In Algorithms and Theory of Computation Handbook, CRC Press	(PR)(CO)
O6	2009	R. Hearn and E. Demaine	Games, Puzzles, and Computation	A.K. Peters	(CO)
O7	2010	D. Ajwani and H. Meyerhenke	Realistic Computer Models	In Algorithm Engineering. Bridging the Gap Between Algorithm Theory and Practice, Springer Verlag	(CO)
O8	2011	H. Balslev, L. Arge, J.-C. Svenning, M. H. Schierup and C. S. Jensen	Abstracts of Royal Danish Academy of Sciences Symposium on Biodiversity in the Silicon Age		(CO)
O9	2012	L. Arge and K. G. Larsen	I/O-Efficient Spatial Data Structures for Range Queries	Invited abstract in SIGSPATIAL Special, July, 2012.	
O10	2012	B. Sandel, L. Arge, B. Dalsgaard, R.G. Davies, K.J. Gaston, W.J. Sutherland and J.-C. Svenning	Response - Global endemism needs spatial integration	Science 335	(CO)
O11	2014	U. Meyer and N. Zeh	I/O-model	Encyclopedia of Algorithms, second edition	(CO)
O12	2014	U. Meyer and N. Zeh	List-Ranking	Encyclopedia of Algorithms, second edition	(CO)

Personel		Hiring	Finansing (fraction of year) *)			Forign	For PhD and	For PhD:	Gender
Name	Position	period in 2012 **)	Foundation	AU	Other finan-sing ***)	employee	Post Doc: Previous education	Finished degree	
Centerleder									
Lars Arge (AU)	Professor	all period	0,1	0,9					M
Faculty									M
Gerth S. Brodal (AU)	Professor	all period		1					M
Peyman Afshani (AU)	Associate Professor	all period		1		x			M
Kasper G. Larsen (AU)	Assistant Professor	all period	0,3	0,7					M
Piotr Indyk (MIT)	Professor	all period	0,1		0,1	x			M
Erik Demaine (MIT)	Professor	all period	0,1		0,1	x			M
Kurt Mehlhorn (MPI)	Professor	all period			0,1	x			M
Ulrich Meyer (FRA)	Professor	all period			0,2	x			M
Brody Sandel (AU)	Assistant Professor	all period		0,5	0,5	x	PhD		M
Allan G. Jørgensen (AU)	Post Doc	all period			1		PhD		M
Constantinos Tsirogiannis (AU)	Post Doc	all period	0,8		0,2	x	PhD		M
Zenfeng Huang (AU)	Post Doc	-31.08	0,7			x	PhD		M
Wanbin Son (AU)	Post Doc	-28.02	0,2			x	PhD		M
Frank Staals (AU)	Post Doc	01.08-	0,4			x	PhD		M
Jesper Asbjørn Sindahl Nielsen (AU)	Post Doc	01.08-	0,4				PhD		M
Guests									
Yannik Stein	PhD student	14.09-9.10			0,1	x	MS		M
Andrea Farruggia	PhD student	- 01.02			0,2	x	MS		M
Tehnical staff									
Sven Svendsen	Programmer	all period	1						M
Administrative staff									
Trine Holmgaard	Center manager	all period	0,5	0,5					F
Ellen Kjemtrup	Accountant	all period		0,5					F
Katrine Ø. Rasmussen	Student assistant	all period		1					F
Ph.d.-studerende									
Jacob Truelsen (AU)	PhD student	-28.02		0,2			BS + 1 year	x	M
Jesper Asbjørn Sindahl Nielsen (AU)	PhD student	-31.07			0,6		BS + 1/2 year	x	M
Jungwoo Yang (AU)	PhD student	-28.02	0,2			x	MS	x	M
Bryan Wilkinson (AU)	PhD student	-31.07	0,6			x	MS	x	M
Sarfraz Raza (AU)	PhD student	-31.01			0,1	x	MS		M
Mathias Rav (AU)	PhD student	all period		0,7	0,3		BS+0.5 year		M
Edvin Berglin (AU)	PhD student	all period	1			x	MS		M
Ingo van Duijn (AU)	PhD student	all period	1			x	MS		M
Konstantinos Mampentzidis (AU)	PhD student	all period	0,4	0,6		x	BS + 1 year		M
Yujin Shin (AU)	PhD student	01.04-			0,8	x	MS		F
Kasper Sacharias Eenberg (AU)	PhD student	01.08-	0,4				BS+1 year		M
Volker Weichert (MPI/FRA)	PhD student	-31.12			1	x	MS	x	M
David Veith (MPI/FRA)	PhD student	all period	0,2		0,8	x	MS		M
Manuel Penschuck (MPI/FRA)	PhD student	01.03-			0,8	x	MS		M
Ludwig Schmidt (MIT)	PhD student	all period			1	x	BS		M
Haitham Hassanieh (MIT)	PhD student	-31.12			1	x	BS	x	M
Ali Vakilian (MIT)	PhD student	all period	0,2		0,8	x	BS		M
Jayson Lynch (MIT)	PhD student	all period			1	x	BS		M
Ilya Razenshteyn (MIT)	PhD student	all period			1	x	MS		M
Arturs Backurs (MIT)	PhD student	all period			1	x	BS		M

*) Approximation. Max one decimal.

**) More then three weeks.

***) Including no financing.