Title: From the Coal Face of Spectrum Auctions

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You can't see it, you can't touch it, but without it you'd be disconnected from the modern networked world. Radio spectrum is a finite resource, and with current technology at least, there is scarcity in many useful parts of it. From a history of spectrum management via command and control approaches, over the last 15 years or so we have seen a shift towards the use of market based mechanisms for the allocation of radio spectrum to users. The use of auctions for the awarding of spectrum to mobile phone companies is current 'normal'.

Having worked on quite a number of spectrum auctions for both mobile network operators and regulatory authorities, I will present a perspective from the coal face of bidding in some of the more popular auction formats – the Simultaneous Multiple Round Auction (SMRA) and the Combinatorial Clock Auction (CCA).

Developing bidding strategy and the testing of auction formats often relies heavily on computational simulation and I will touch on some of the approaches I have employed to get an angle on novel auction mechanisms, and critically build and communicate the implications of the auction format to business people and organisational decision makers.