Title: Exchange of Indivisible Objects with Indifferences in Preferences

Jay Sethuraman

I will talk about the problem of reallocating indivisible objects amongst a set of agents when the preference ordering of each agent may contain indifferences. The same model, but with strict preferences, goes back to the seminal work of Shapley and Scarf in 1974. When preferences are strict, we now know that the Top-Trading Cycles (TTC) mechanism invented by Gale is Pareto efficient, strategy-proof, and finds a core allocation, and that it is the only mechanism satisfying these properties. I will talk about the extent to which these results generalize to the setting with indifferences and discuss some applications.

(Based on joint work with Daniela Saban and Parag Pathak.).