A mechanism-design approach to property rights (joint with Piotr Dworczak)

Abstract:

We propose a framework for studying the optimal design of rights relating to the control of an economic resource — which we broadly refer to as property rights. An agent makes an investment decision, affecting her valuation for the resource, and then participates in a trading mechanism chosen by a principal in a sequentially rational fashion, leading to a hold-up problem. A designer — who would like to incentivize efficient investment and whose preferences may differ from those of the principal — can endow the agent with a menu of rights that determine the agent's set of outside options in the interaction with the principal. We characterize the optimal rights as a function of the designer's and the principal's objectives, and the investment technology. We find that optimal rights typically differ from a classical property right giving the agent full control over the resource. In particular, we show that the optimal menu requires at most two types of rights, including an option-to-own, which grants the agent control over the resource upon paying a pre-specified price.