Abstract:

The talk will examine a multidimensional screening problem in which agents differ in both skills and ethical motivation. The planner designs a public-sector hiring mechanism when skills affect productivity in both the public sector and the private sector (the agents' outside option), while ethical motivation generates value only in the public sector and is neither observable nor contractible. The mechanism must specify hiring rules and wages subject to incentive-compatibility and participation constraints.

Reformulating the problem in terms of agents' indirect utilities and applying envelope conditions, I show that the planner's objective is linear in these utilities and their derivatives. and that optimal mechanisms lie at the extreme points of the feasible set. Using a novel mathematical result tailored to this environment, I also show that the optimal mechanism is bang-bang: each type is either fully hired in the public sector or not hired at all, and all public-sector hires receive the same constant wage. This finding contrasts with the more complex allocation rules often seen in the multidimensional screening literature.

The analysis then explores how the optimal wage responds to the distribution of types, such as agents' dispersion in skills, in ethical motivation, and correlation across these components.