Maxim Bichuch and Zachary Feinstein* (zfeinste@stevens.edu). *Endogenous Price Impacts and Inverse Demand Functions.*

In this talk we present an equilibrium formulation for price impacts. This is motivated by the Bühlmann equilibrium in which assets are sold into a system of market participants and can be viewed as a generalization of the Esscher premium. Existence and uniqueness of clearing prices for the liquidation of a portfolio are studied. Additional properties of the liquidation value of a portfolio are studied, e.g., monotonicity and concavity. Price per portfolio unit sold is also presented. In special cases we study price impacts generated by market participants who follow the exponential utility and power utility. (Received August 31, 2020)