**ECONOMETRICS COLLOQUIA SEMINAR ON**

**WEDNESDAY, 12/6/2017**

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Title: "Identification and Estimation of Dynamic Discrete Demand Using Aggregate Data"

Abstract: This paper considers the identification and estimation of dynamic demand for differentiated products using aggregate data. Our model follows previous literature on dynamic discrete choice models of demand. In particular, the model explicitly allows for endogenous prices and serially correlated unobserved product characteristics. We prove the identification of all structural parameters, including consumer's preference and the joint distribution of product characteristics (including the unobserved product characteristics). Knowing these structural parameters, one can estimate some parameters of interests, such as price elasticity, and conduct a variety of counterfactual analysis, such as introduction of new product. We develop a two-step estimation method for all structural parameters. Our method does not involve solving or approximating dynamic programming problem, hence it is free from the curse of dimensionality in the existing estimation method of dynamic demand.