Date	**November 15, 2017 (Wednesday)**
Speaker	**Prof. Shakeeb Khan**
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Paper Title	**Identification and Inference for Dynamic Discrete Choice Panel Data Models**
Paper1	**Identification in Static and Dynamic Semiparametric Discrete Response Panel Data Models**
Abstract1	We analyze identification in dynamic and static semiparametric models of discrete choice under general conditions. This class of models is increasingly important in trying to fit choice data while allowing for state dependence, dynamics, and heterogeneity. First, we characterize the sharp set for latent utilities parameters in a dynamic panel data model of binary choice under conditional exchangeability. The analysis is general in that we allow for no covariates, discrete covariates, time trends and/or time dummies and we do not require the existence of continuous regressors. The identified set can be characterized by a union of convex polyhedrons. Second, we show the assumption that the unobserved utility components are stationary and independent over time conditional on observables has no identifying power on top of conditional exchangeability condition. Third, we derive the identified set under full independence and show that this set may not coincide with the approach used in Honor'e and Kyriazidou (2000). We extend our identification approach to multinomial choice models (both static and dynamic).
Paper2	**Adaptive Inference in Semiparametric Multinomial Response Models**
Abstract2	We consider identification, estimation and inference on regression coefficients in semi parametric multinomial response models. Our identification result is constructive and estimation is based on a localized rank objective function, loosely analogous to that used in Abrevaya, Hausman, and Khan (2010). We show this achieves sharp identification which is in contrast to existing procedures in the literature such as, for example, Ahn, Powell, Ichimura, and Ruud (2014). In that sense, our procedure is adaptive (Khan and Tamer (2009)) in the sense that it provides an estimator of the sharp set when point identification does not hold, and a consistent point estimator when it does. Furthermore, our rank procedure extends to panel data settings for inference in models with fixed effects, including dynamic panel models with lagged dependent variables as covariates. A simulation study establishes adequate finite sample properties of our new procedures.
Paper3	**Informational Content of Exclusion Restrictions in Dynamic Discrete Response Panel Data Models**
Abstract3	We study the informational content of widely used identifying assumptions in dynamic discrete panel data models. In our analysis to dynamic discrete choice panel data models, e.g. Honore and Kyriazidou (2000), Arellano and Carrasco (2003), we find that while neither the exclusion restriction as proposed in Honor'e and Lewbel (2002), nor serial independence add informational content by themselves, jointly they do in the sense that under both restrictions, regular identification can be achieved. In this setting we also propose a new estimation procedure that converges at the parametric rate with a limiting normal distribution.