*Social Science*
*Planning Group Members: Petra Ahrweiler and Takako Fujiwara-Greve*

*Economic diversity*

<u>*Speaker:*</u>

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**Title**: Empirical Analysis of Economic Variety

The economics of innovation in the Neo-Schumpeterian and evolutionary tradition highlight the role of heterogeneity and variety as a driving force for and a result of knowledge creation and economic development. Different actors are endowed with different resources and competences, employ different technologies, pursue different strategies, etc. Subsequently actors also differ in the results obtained by knowledge creation and innovation activities. The importance of heterogeneity and variety can not be adequately represented by the model of representative agents as maintained by mainstream neoclassical economics. To understand the innovation and economic development it is essential to consider variety and to allow for variety in the empirical analysis. Yet, most empirical analysis focuses on the representative agent by analysing the average actor. Empirical investigation more often than not establishes relationships about the 1st moment of the distribution rather than analysing the whole distribution.

The presentation will summarize approaches which explicitly integrate the notion of variety in the analysis: kernel density estimation (Scott 1992; Wand, Jones 1995) and quantile regression (Koenker, Basset 1978; Buchinsky 1998; Koenker 2005). Illustrative empirical examples (Reichstein et al. 2006; Ebersberger et al. 2005) are presented. The difference between analysis of the analysis of the mean and an analysis of the whole distribution is highlighted. The presentation shows that by applying approriate tools empirical analysis can give rise to a better understanding of the role and the effects of economic variety in the process of economic development.

For introduction into the topic refer to Koenker, Hallock (2001) or Cantner, Krüger (2007).

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