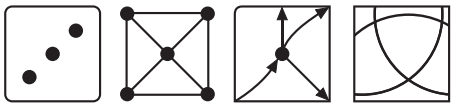
Joint event of the Research Seminar on Foundations of Statistics and the MCMP Colloquium on 29 July 2011

LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN



MCMP & Statistics Department

14:30 Coffee & Cake "MCMP & Statistics Department"

15:15 **Teddy Seidenfeld (Carnegie Mellon University)**

Three contrasts between two senses of coherence

(Joint work with M. J. Schervish and J. B. Kadane – Statistics, CMU)

B. de Finetti defended two senses of *coherence* in providing foundations for his theory of subjective probabilities. $Coherence_1$ requires that when a decision maker announces *fair* prices for random variables these are immune to a uniform sure-loss – no *Book* is possible using finitely many *fair* contracts! $Coherence_2$ requires that when a decision maker's forecasts for a finite set of random variables are evaluated by Brier Score – squared error loss – there is no rival set of forecasts that dominate with a uniformly better score for sure.

De Finetti established these two concepts are equivalent: *fair* prices are $coherent_1$ if and only if they constitute a $coherent_2$ set of forecasts if and only if they are the expected values for the variables under some common (finitely additive) personal probability.

I report three additional contrasts between these two senses of *coherence*. One contrast (relating to finitely additive probabilities) favors $coherence_2$. One contrast (relating to decisions with moral hazard) favors $coherence_1$. The third contrast relates to the challenge of state-dependent utilities.

This event will take place at the Alte Statistik-Bibliothek, Ludwigstr. 33, R. 245; it is kindly supported by the *Institutskolloquium des Instituts für Statistik*

More info online: www.statistik.lmu.de/~thomas/Research/ResearchSeminar
www.philosophie.uni-muenchen.de/lehreinheiten/logik_sprachphil/mcmp