

Title of the talk: Between first and second-order stochastic dominance

Speaker: Alfred Müller

Abstract: We introduce a new class of stochastic order relations with a parameter  $\gamma \in (1,2)$  that is stronger than second-order stochastic dominance but weaker than first-order stochastic dominance, and interpolates between these two orders. As for these classical stochastic orders we derive for each  $\gamma$  equivalent conditions in terms of a class of utility functions defining the order and in terms of an integral condition. Moreover, we give a characterization for discrete distributions in terms of a sequence of probability shifts generalizing the notion of a mean preserving spread. This is joint work with Marco Scarsini, Ilia Tsetlin and Robert Winkler.