WCAS Center for Economic Theory Kellogg Center for Mathematical Studies in and Management Science Theory Workshop

Wednesday, April 22, 2015 3:30-5:00pm Jacobs 3245 (WCAS Economics dept. seminar room) Reception following in 531 Jacobs Center

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Monetary policies in self-confirming equilibria with uncertain models

(with P. Battigalli, S. Cerreia-Vioglio, M. Marinacci, and T. Sargent)

Abstract: Rational expectations models remove pervasive inconsistencies in pre-rational expectations models between decision makers' beliefs and what observers can infer statistically from (long) histories of outcomes. But they do much more. Rational expectations models eradicate discrepancies between decision makers' beliefs and what would be empirical distributions under decisions that have not been and will not be taken.

The concept of a self-confirming equilibrium weakens rational expectations by requiring consistency only between decision makers' beliefs and what can be inferred statistically from (long) histories of outcomes under decisions that they actually make. By leaving room for decision makers to have 'wrong' views about distributions of outcomes under decisions that they do not take, a self-confirming equilibrium can naturally confront decision makers with model uncertainty.

We study how model uncertainty affects sets of self-confirming beliefs and actions.

We illustrate our machinery in the context of a 1970's U.S. policy debate about whether there is a trade-off between inflation and unemployment that can be systematically exploited by a benevolent policy maker.

http://www.kellogg.northwestern.edu/research/math/centerinfo/theoryworkshops.htm