Our speaker will be Dave Dixon, Senior Lecturer, Department of Economics, UNM

Title: Two Complexity Measures in Economics

ABSTRACT:

Complexity is an umbrella term to encompass complex systems, complex systems science, and measures of complexity. Complex systems science, in turn, brings together ideas like self-organization, emergence, nonlinear dynamics, and chaos, among others. Applications range from the mostly infotainment uses of fractals and the Lorenz attractor to cardiovascular diagnostics using Nash Embedding Theory. This talk will be an overview of current research using Nash Embedding Theory and the Lyapunov exponent (a measure of chaos) in economic analysis.

BIO:

Dave Dixon is a Senior Lecturer in the Department of Economics at UNM. He began in Physics (MS UNM 1993), working primarily in computer simulation, and was introduced to complexity while working with a Santa Fe Institute spin-off company in the 1990s. From that time until 2012, Dave worked with various government contractors - including his own firm - applying agent-based modeling (a complexity approach) to problems of political and military conflict. Looking for a change, Dave came back to UNM and completed a PhD in Economics in 2011, with dissertation research applying agent-based modeling to natural resource economics. After a one-year visiting professorship in Florida, Dave returned once again to UNM in a teaching role as a Lecturer in Economics. The complexity research continues - witnessed by the works in progress discussed here - and Dave is an organizer of conferences and conference sessions on complexity and agent-based computation economics on both coasts and in Santa Fe, NM. Some of his research projects make use of very large ensembles of parallel simulations run on supercomputers at UNM's Center for Advanced Research Computing (CARC).

Alcoholic drinks will be available before dinner
Dinner:
New Mexican Buffet, consisting of:
Chips and Salsa
Dinner Salad
Cheese Enchiladas with Red Chile
Chicken Enchiladas with Green Chile
Chicken Fajitas
Beans Rice
Natillas
Soft Drinks

Dessert:
Sopapillas and Honey

Walter Gerstle	1
Paul Schwoebel + wife	2
Sam Roll	1
Dave Dixon	1
Les and Roxie McFadden	2
Larry Barton	2
Jim and Connie Thorson	2
Jim Ellison	1
Wolfgang Rudolph + Carinne	2
Andy His + wife	2
Janet Oliver	2