1106-91-1172 **Dawna C Jones*** (djones3@math.fsu.edu), 208 Love Building, 1017 Academic Way, Tallahassee, FL 32306. *Heterogeneous Lucas Asset Pricing with Adaptive Learning.* Preliminary report.

The standard general equilibrium asset pricing models typically undertake two common assumptions of homogeneous agents and rational expectations equilibrium. However, this context sometimes yields outcomes that are inconsistent with the empirical findings. That is, if the agents are perfectly rational then it proves difficult to implement a model that violates the no-trade theorems. As such, we have sought to implement an artificial asset market where the agents are, instead, boundedly rational, utility maximizing, infinitely lived and forward looking. When agents are out of equilibrium, they will simultaneously solve their decision rules along with predictive pricing functions at each time period. Also, the agents will be endowed with constant gains, stochastic gradient and recursive least square adaptive learning schemes to learn the true motions of the pricing functions.

We analyse the implementation of adaptive learning in a Lucas asset pricing model with heterogeneous agents. We focus on the sensitivity of the initial conditions and the convergence of the model to the general equilibrium. (Received September 11, 2014)