John Angle* (angle@inequalityprocess.org), Inequality Process Institute, P. O. Box 429, Cabin John, MD 20818. A Particle System That Mimics Empirical Income Dynamics.

The Inequality Process ('inequality' in the sociological sense) was abstracted from an old theory of economic anthropology about why substantial differences of wealth appeared whenever hunter/gatherers acquired a food surplus. Perhaps surprisingly, this stochastic interacting particle system implies a wide variety of statistics of empirical income dynamics at the micro (individual) as well as the macro (distribution) level in industrial societies. The Inequality Process dates from the early 1980's and is similar to an ad hoc modification of the stochastic version of the kinetic theory of gases published in 2000 as econophysics. Since the explanandum of the Inequality Process is much wider and it is grounded in social science, the Inequality Process has replaced the latter particle system as the frontier of the econophysics of wealth and income. (Received September 12, 2008)