

1145-60-2125 **Eddie B. Tu*** (tue@dickinson.edu), 20 N. Pitt St., #2, Carlisle, PA 17013. *Association and other forms of positive dependence for Feller evolution systems.*

Feller evolution systems are a class of stochastic processes which contain interesting examples, such as additive processes and certain stochastic volatility models. These processes have Lévy-type behavior and can be temporally and spatially inhomogeneous. We propose methods of characterizing strong forms of positive dependence, such as association, positive supermodular association, and positive orthant dependence, for Feller evolution systems. We give characterizations for general Feller evolution systems and for jump-Feller evolution systems, and we will look at specific examples in additive processes and certain stochastic volatility models. (Received September 24, 2018)