1063-62-252   **George O Mohler***, Santa Clara University, San Jose, CA 95126. *Point process modeling and estimation of near-repeat effects in crime data.*

Highly clustered event sequences are observed in crime data due to various patterns of criminal behavior. We show how these "near-repeat" effects can be incorporated into macroscopic models of crime using self-exciting point processes similar to models of earthquake aftershock sequences. We discuss both parametric and nonparametric approaches, illustrated with burglary and gang data provided by the Los Angeles Police Department. (Received August 17, 2010)