

ADVANCES IN PARAMETER ESTIMATION FROM EVENT COUNT DATA

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In modeling a system, identifying the times at which the state of the system changes is important. In particular, the probability distributions of the interevent times (time lengths between consecutive events) of each process (such as interarrival times) are required in a simulation model. Often information characterizing the interevent times may be unavailable or difficult to obtain. On the other hand, the number of event per unit time is simple and economical to collect.

In the last few years, there has been much research in stochastic modeling using point processes by a varied group of researchers. Despite this extensive and diverse research effort, little attention has been given to estimation techniques based on event count data rather than event time data. This paper discusses recent advances (in the last year) in estimation based on event count data.