ROBUSTNESS FOR INHOMOGENEOUS POISSON POINT PROCESSES

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(Received March 17, 1995; revised May 25, 1998)

Abstract. We consider robustness for estimation of parametric inhomogeneous Poisson point processes. We propose an influence functional to measure the effect of contamination on estimates. We also propose an M-estimator as an alternative to maximum likelihood estimator, show its consistency and asymptotic normality.

Key words and phrases: Robustness, influence function, M-estimator, point process, Poisson process.