Asymptotic behaviour of inhomogeneous Poisson gaps

Søren Asmussen[*]

[*]*Aarhus University, Denmark*

Abstract. The behaviour of longest runs of ones in Bernoulli 0–1 sequences is a classical topic going all the way back to von Mises, Erdös, Revesz and others. The continuous time analogue is gaps in Poisson processes and we study here time inhomogeneity. The results are of two types, large deviations of the time to gaps of a certain size and convergence in distribution where several links to classical extreme value theory show up.

Joint work with Jevgenij Ivanovs and Johan Segers.