

Spatial-Temporal Marked Point Processes : A Spectrum of Stochastic Models

Eric Renshaw¹

¹ Department of Statistics and Modelling Science, University of Strathclyde, Livingstone Tower, 26 Richmond Street, Glasgow G1 1XH, UK.

Abstract: A variety of stochastic modelling approaches are presented, from exact event-time to fully deterministic, which are then placed within the context of spatial-temporal marked point processes. Particular applications considered include forest management and high-intensity packing of hard particle systems.

Keywords: Growth-interaction processes; Stochastic approximation techniques; Soft- and hard-core packing; Forest management; Particle systems.