On a model of sequential point patterns

V. Shcherbakov

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Abstract A finite point process motivated by the cooperative sequential adsorption model is proposed. Analytical properties of the point process are considered in details. It is shown that the introduced point process is useful for modeling both aggregated and regular point patterns. A possible scheme of maximum likelihood estimation of the process parameters is briefly discussed.

Keywords Cooperative sequential adsorption model \cdot Finite point process \cdot Local stability \cdot Maximum likelihood estimation \cdot MCMC methods