Abstract: In electrostatic terminology, an electrical field of a stationary point process is a vector field whose distributional divergence is equal to the counting measure of the point process minus the Lebesgue measure. In the talk we will give a simple answer to the following question: when does a planar stationary point process generate a stationary electrical field? If time permits, we will also discuss some properties of this stationary field, for instance, its covariance structure, and the size of fluctuations of line integrals.

Based on joint work with Mikhail Sodin and Aron Wennman

Monday, September 11 at 2:00 PM in 636 SEO