

abstract

MATHEMATICAL-PHYSICS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

A (one-dimensional) translation invariant point process of bounded variability is one in which the variance of the number of particles in any interval is bounded, uniformly in the length of the interval. This represents a strong suppression of fluctuations in comparison to, say, the Poisson process; nevertheless, we give an example of such a process for which a large deviation principle holds. We obtain the rate functional for observing a specified coarse-grained density profile in an interval, in the limit in which the length of the interval becomes infinite. This rate function is not convex and is discontinuous at the (typical) constant profile.