Singapore, Singapore. Probability distribution for a particle's position in the inhomogeneous totally asymmetric zero range process.
In this talk we consider the totally asymmetric zero range process on the integer lattice in which sites are equipped with exponentially distributed random clocks with different rates. We provide the formula for the distribution of the m-th rightmost particle's position given an arbitrary initial state of finitely many particles. In particular, we find the formula represented by a Fredholm determinant of a certain trace-class operator for a special initial state that all particles are at a single site. Finally, we give a result for asymptotics. (Received September 20, 2016)

