Abstract: "Large Deviations and Subexponential Random Variables and application to a System of Interacting Particles"

We will discuss a Gibbs Conditioning Principle for subexponential random variables. We will then use this result in the context of Zero Range Processes to explore the bulk fluctuations and the fluctuations of the size of the condensate in equilibrium, as well as the onset of condensation as we move from subcritical to supercritical densities.

(Joint work with Ines Armendariz and Stefan Grosskinsky.)