

**Dr. Mikael Fremling, Utrecht University**

**Title: Detecting the onset of crystalline order using full counting statistics**

**Abstract:**

Here I will discuss various types of statistics measures that can be employed to detect when particles are about to crystallize into a solid phase. Perfectly there has been proposals that certain non-interacting fermionic systems could still exhibit spacial ordering due to the quantum mechanical repulsion that always exists between fermions. The talk would start of by discussing the above mentioned recent proposal and the methods that where used to support it. Then I would show why these (statistical) methods do not work, and can be highly misleading, after which i would talk about our own ideas and results.