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## **ICTS Condensed Matter Seminar**

**Title** : Phase transitions in a gas of hard rods on lattices

**Speaker** : R. Rajesh (The Institute of Mathematical Sciences, Chennai)

**Date** : Tuesday, 13<sup>th</sup> September, 2022

**Time** : 3:00 pm (IST)

**Abstract** : The phases and phase transitions of a solution of long cylindrical rods with only hard core interactions is a classical problem in statistical physics with a long history, starting with the work of Onsager in 1949, who showed that the rotational symmetry is broken at sufficiently large density. The corresponding problem on lattices has received lot of attention in recent years. In this talk, I will review known results, including some of our recent results on the entropy of the fully packed limit, and discuss some generalisations

**Venue** : **Offline:** Emmy Noether Seminar Room

**Online:** Please click on the below link to join the meeting

<https://icts-res-in.zoom.us/j/81064115930?pwd=aTJVTjJhZURSY2RWZlZ3UnUwV0FMdz09>

Meeting ID: 810 6411 5930

Passcode: 255542