

CONDENSED MATTER THEORY SEMINAR

Subject: **Bosons in flat bands, some rigorous results**
Speaker: **Prof. Dr. Andreas Mielke (Universität Heidelberg)**
Date & time: **Friday, January 26th, 2018 at 3.15 p.m.**
Venue: **Seminar room 1.114**

Fermions in flat band systems have been studied since more than 25 years and many general rigorous results are available. For bosons, rigorous results are only available under restricted conditions. A special class of lattices or a strong repulsion is needed. In this talk we review and explain rigorous results for bosons in flat bands including the formation of Wigner crystals at a critical density and pair formation above that density.