

CONDENSED MATTER THEORY SEMINAR

Subject: **Transport in systems with degenerated band structure**

Speaker: **Dr. Andreas Sinner (Universität Augsburg)**

Date & time: **Friday, May 19th, 2017 at 3:15 p.m.**

Venue: **Seminar room 1.114**

Low dimensional systems of electrons with band degeneracy reveal a plethora of interesting physical phenomena. It was long accepted that the transport in low dimensions is mainly determined by the Anderson localization hypothesis. According to this, electronic wave functions in a random potential landscape are always localized irrespectively of the strength of random potential. The discovery and experimental realization of novel two-dimensional structures, which have very robust transport properties even in spite of a high degree of disordering, has shed a new light on the notion of Anderson localization. In this talk, the phenomenology of the transport physics in systems with degenerated band structures will be discussed and some new results presented.