

SPECIAL CONDENSED MATTER THEORY SEMINAR

Subject: **Quantum transport and polaron formation in electron-phonon-coupled heterojunctions**

Speaker: **Christian Bick (ITP, Leibniz Universität Hannover)**

Date & time: **Thursday, November 7th, 2019 at 2:00 p.m.**

Venue: **Seminar room 1.101**

In this talk a one dimensional lattice with possible phonon interactions, as described in the Holstein model, is being discussed with respect to electronic transport. This method is using the time-evolving block decimation algorithm (TEBD) with local basis optimisation. The talk will introduce the TEBD algorithm, show its technical limitations and present the results of the investigation.