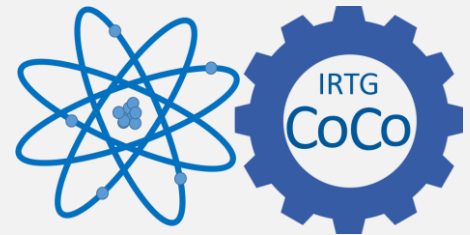


## IRTG-Seminar



### John Sous

*University of British Columbia, Vancouver*

## “A self-trapping transition for Peierls bipolarons”

A Polaron is a particle in a cloud of phonons. Bipolarons are bound states of two particles in a phonon cloud. Here, we present results for Peierls bipolarons. We find that phonon-mediated effects are non-trivial. In presence of strong bare interactions, the ground state has a rich phase diagram exhibiting non-analytic transitions, one of which is a quasi self-trapping transition.

**Tuesday, October 25<sup>th</sup>, 2016, 6:00 p.m., Room 023, University Computing Center, Hermann-Herder-Straße 10**