

## TRR 80 Sonderseminar

Am Dienstag, den 14. November um 16:00 Uhr

spricht

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über das Thema

## Competing Orders in Luttinger and Dirac Liquids

Strongly correlated materials are often characterized by competing interactions that promote different phases. I will present exact quantum Monte Carlo results for the problem of a Luttinger liquid with competing site and bond electron-phonon interactions, and for a Dirac liquid with competing mass terms that promote either an antiferromagnet or a valence bond solid. In the electron-phonon problem, a key question is if a metallic phase arises and what its properties are. In the Dirac problem, I will provide evidence for a direct and continuous transition between the two ordered states that cannot be reconciled with Landau theory.

Gäste sind herzlich willkommen. Der Vortrag findet im Seminarraum S-288, Institut für Physik, Universität Augsburg statt.

Gastgeber: Prof. Dr. Thilo Kopp www.trr80.de