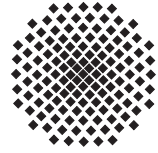


# Stuttgarter Physikalisches Kolloquium

Max-Planck-Institut für Festkörperforschung  
Max-Planck-Institut für Intelligente Systeme  
Fachbereich Physik, Universität Stuttgart

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Dienstag, 5. Mai 2015

17.15 Uhr

Hörsaal 2 D5

Stuttgarter Max-Planck-Institute, Heisenbergstraße 1, 70569 Stuttgart-Büsnau

## Nonequilibrium dynamics of fermions: from resonant X-ray scattering in solids to ultracold atoms

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### Abstract

Many new experimental techniques in condensed matter physics go beyond the paradigm of linear response measurements. I will use example of resonant X-ray scattering in high  $T_C$  cuprates to demonstrate how new insights into experimental results can be gained by considering their non-equilibrium aspects. I will also discuss on-going experiments with ultracold atoms that can help address open problems of quantum dynamics of many-body fermionic systems.