



# FRIAS

FREIBURG INSTITUTE  
FOR ADVANCED STUDIES  
ALBERT-LUDWIGS-  
UNIVERSITÄT FREIBURG



## Nonlinear Spectroscopy meets Quantum Optics

Scientific context: This workshop aims to stimulate interdisciplinary exchange between experts in quantum optics and in nonlinear spectroscopy of complex systems. The controlled assembly of synthetic quantum systems requires the development of novel tools for the efficient and scalable characterization of nonequilibrium many-body dynamics, where expertise from nonlinear spectroscopy is expected to be helpful. Conversely, the use of quantum properties of light for spectroscopic applications stands to provide new tools for the interrogation of complex quantum systems ranging from solid state devices to molecular aggregates.

**Date:** October 8 – 10, 2014

**Place:** **Freiburg Institute for Advanced Studies (FRIAS)**  
University of Freiburg  
Albertstraße 19  
D-79104 Freiburg im Breisgau  
Germany

List of invited speakers:

**Shaul Mukamel**  
University of California, Irvine

**Theodore Goodson III**  
University of Michigan

**Mackillo Kira**  
Philipps-Universität Marburg

**Marten Richter**  
Technische Universität Berlin

**Claude Fabre**  
Laboratoire Kastler Brossel, Paris

**Christian Roos**  
Universität Innsbruck

**Vahid Sandoghdar**  
MPI for the Science of Light, Erlangen

**Tobias Brixner**  
Universität Würzburg

**Stefan Kuhr**  
University of Strathclyde

**Shannon Whitlock**  
Universität Heidelberg

**Ferdinand Schmidt-Kaler**  
Universität Mainz

**Antoine Browaeys**  
Institut d'Optique, CNRS, Paris

**Tobias Schätz**  
Albert-Ludwigs-Universität Freiburg

**David Gross**  
Albert-Ludwigs-Universität Freiburg

**Gerhard Stock**  
Albert-Ludwigs-Universität Freiburg