

# Physikalisches Kolloquium



Thursday, 29.01.15, 17:15, HS 100  
 Reception with coffee & cookies 16:45

Prof. Philipp Demekhin, Universität Kassel

## ANTRITTSVORLESUNG: Angular Resolved Spectroscopy of Molecules

### Abstract

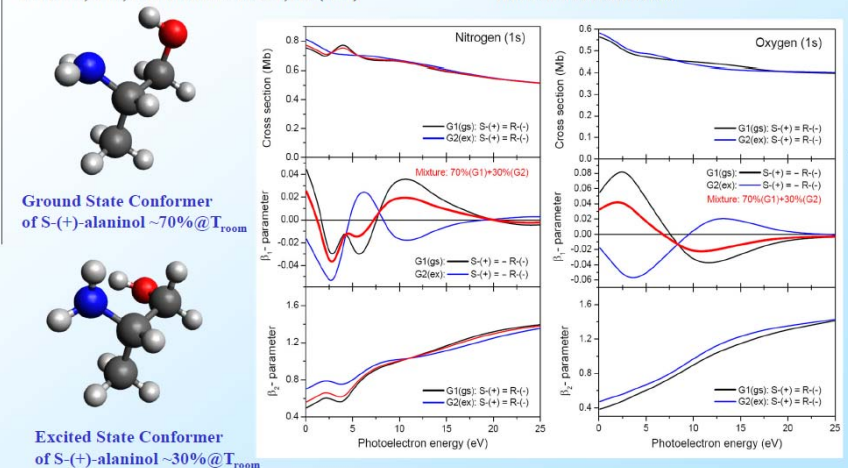
Recent progress in the development of light sources and tremendous advances in experimental techniques enabled a set of new experiments on molecular photoionization and decay processes with ultra-high resolutions and even in the angular-resolved mode. Interpretation of the results of such experiments requires development of new advanced nonstandard theoretical and computational approaches. In this talk, we first review the present status of the experimental and theoretical angular resolved spectroscopy of atoms and molecules and then turn to the theoretical approach developed in the group exemplifying it by several interesting applications. Our very recent results on the angular resolved spectroscopy of polyatomic and chiral molecules obtained within the State Hessen Initiative for the Development of Scientific and Economic Excellence (LOEWE) in the focus-project Electron Dynamic of Chiral Systems (ELCH) are also presented.

### Photoelectron circular dichroism in chiral molecules

#### 2-amino-1-propanol (alaninol)

R. Fausto, et al., J. Mol. Struct. 550–551, 365 (2000).

Inner-Shell Photoionization



Antrittsvorlesung, Ph. Demekhin, Kassel, 29.01.2015

All of you interested in physics are cordially invited!

Contact: Dekanat des Fachbereichs 10 und Prof. T. Baumert, More Information: [uni-kassel.de/go/physikalisches\\_kolloquium](http://uni-kassel.de/go/physikalisches_kolloquium)