## Symposium Molecules in Helium Droplets (SYHD)

jointly organised by the Molecular Physics Division (MO) and the Atomic Physics Division (A)

Alkwin Slenczka Universität Regensburg alkwin.slenczka@chemie.uni-regensburg.de

With 4 invited talks, SYHD reports on helium considering dimers up to nano-sized droplets, the latter empty, singly doped with molecules, with clusters via multiple particle doping, and ionized droplets, addressing quantum features such as vortices, quantum halos and Efimov states. Thereby, techniques such as coulomb explosion imaging, coherent diffractive imaging with X-FEL pulses, messenger spectroscopy of ions, and mass selected ion spectroscopy are applied as well as time dependent helium density functional theory.

## **Overview of Invited Talks and Sessions**

(Lecture hall E415)

## **Invited Talks**

| SYHD 1.1 | Wed | 11:00-11:30   | E415 | Structure and field-induced dynamics of small helium clusters —<br>•Maksim Kunitski, Jan Kruse, Qingze Guan, Dörte Blume, Reinhard<br>Dörner |
|----------|-----|---------------|------|--|
| SYHD 1.2 | Wed | 11:30-12:00   | E415 | Coherent Diffraction Imaging of isolated helium nanodroplets and   |
|          |     |               |      | their ultrafast dynamics — •DANIELA RUPP   |
| SYHD 1.3 | Wed | 12:00-12:30   | E415 | Clustering dynamics in superfluid helium nanodroplets: A theoretical   |
|          |     |               |      | study — •Nadine Halberstadt, Ernesto García Alfonso, Martí Pi,   |
|          |     |               |      | Manuel Barranco  |
| SYHD 1.4 | Wed | 12:30 - 13:00 | E415 | Messenger spectroscopy of molecular ions – Development of a new  |
|          |     |               |      | experimental setup — •ELISABETH GRUBER   |

## Sessions

SYHD 1.1–1.4 Wed 11:00–13:00 E415 Molecules in Helium Droplets