## Sunday, 29 September 2019

16:00 – 20:00	Registration	
18:00	BUFFET SUPPER and	get-together
19:30 – 19:40	Scientific organizers	Welcome words
19:40 – 20:40	Manfred Kappes	Resolving clusters

## Monday, 30 September 2019

08:00	BREAKFAST	
09:00 – 09:40	Andreas Wolf	Molecular and cluster ions in a cryogenic storage ring – from internal cooling to merged-beam electron collisions
09:40 – 10:20	Michael Martins	Supported clusters in the view of X-rays
10:20 – 10:40	COFFEE BREAK	
10:40 – 11:20	Gert von Helden	Spectroscopy of clusters in clusters
11:20 – 11:40	Rico Mayro Tanyag	Nanostructures in superfluid helium droplets
11:40 – 12:00	Michael Kelbg	Temporal development of a laser- induced helium nanoplasma measured through auger emission and above- threshold ionization
12:00 – 12:10	Conference Photo (in	the front of the lecture hall)
12:10	LUNCH	

Uptake and reactions of molecules on

clusters and free nanoparticles in

#### Monday, 30 September 2019

- 15:30 16:10 **Poster Pitch 1**
- 16:10 16:30 COFFEE BREAK
- 16:30 18:00 **Posters**
- 18:00 DINNER
- 19:30-20:10 Michael Farnik
- 20:10 20:30 David Müller Optical cryogenic ion spectroscopy of metalated flavin complexes
- 20:30 Posters

# Tuesday, 01 October 2019

08:00	BREAKFAST	
09:00 – 09:40	Karl-Heinz Meiwes-Broer	Charging, de-charging and detonation of metal clusters
09:40 – 10:20	Lukas Bruder	Coherent nonlinear spectroscopy in the gas phase
10:20 – 10:40	COFFEE BREAK	
10:40 – 11:20	Ewald Janssens	Altering geometry, stability, and chemical reactivity of gold cluster cations by palladium doping
11:20 – 11:40	Vlasta Bonačić-Koutecký	Tuning optical and catalytic properties of ligated noble metal clusters by synergistic role of metallic and organic subunits
11:40 – 12:00	Lutz Schweikhard	Tandem high-resolution multi-reflection time-of flight mass spectrometry for photodissociation studies of (doped) atomic clusters in an electrostatic ion beam trap
12:00	LUNCH	

#### Tuesday, 01 October 2019

- 15:30 16:10 **Poster Pitch 2**
- 16:10 16:30 COFFEE BREAK
- 16:30 18:00 **Posters**
- 18:00 DINNER
- 19:30-20:10 Oliver Kühn
- 20:10 20:30 Martina Lippe Direct observation of cluster size distributions during nucleation in pulsed Laval expansions

Vibronic spectroscopy with classical

trajectories

20:30 Posters

## Wednesday, 02 October 2019

08:00	BREAKFAST	
09:00 – 09:15	Stefan Jorda	About the Wilhelm and Else Heraeus Foundation
09:15 – 09:55	Martin Beyer	The many faces of the hydrated electron
09:55 – 10:15	Arghya Chakraborty	Closer look at salt dissolution: Microhydration of LiX2 <sup>-</sup> (X= Cl <sup>-</sup> , l <sup>-</sup> ) studied by cryogenic ion trap vibrational spectroscopy
10:15 – 10:35	Annika Steiner	Strong temperature and size effects in iron-nitrogen interactions
10:35 – 11:00	COFFEE BREAK	
11:00 – 11:40	Jonas Warneke	Chemistry of electrophilic anions
11:40 – 12:20	André Flielicke	Size selective vibrational spectroscopy of neutral (boron) clusters
12:20	LUNCH	
15:00	<b>Excursion</b> (Visit of a his	storic wine cellar and wine tasting)
18:00	DINNER	
19:30-20:30	Daniel Neumark	Studies of clusters using high resolution negative ion photoelectron spectroscopy
20:30	Posters	

## Thursday, 03 October 2019

08:00	BREAKFAST	
09:00 – 09:40	Stefan Vajda	Catalysis by mono- and bimetallic sub- nm clusters
09:40 – 10:20	Barbara Lechner	Can we control the charge state and structural dynamics of supported clusters?
10:20 – 10:40	COFFEE BREAK	
10:40 – 11:20	Melanie Schnell	Deciphering the structures and intermolecular interactions of weakly bound clusters using highresolution rotational spectroscopy
11:20 – 11:40	Joost Bakker	The adsorption of NO onto group IX transition metal cluster ions
11:40 – 12:00	Andrey Lyalin	Theoretical design of nanocatalysts for oxygen reduction and hydrogen evolution reactions
12:00	LUNCH	

## Thursday, 03 October 2019

15:30 – 16:10	Bernd von Issendorff	Structure and dynamics of metal clusters: old and new tales
16:10 – 16:30	COFFEE BREAK	
16:30 – 17:10	Sandra Lang	Water oxidation on free Calcium- manganese-oxide clusters: gas phase model systems for the catalytically active center of photosystem II
17:10 – 17:30	Alexander Kononov	Fullerene arrangement by vapor deposition on a well-ordered thin Al₂O₃ film grown on Ni₃Al (111) crystal
17:30 – 17:50	Christian van der Linde	Electron catalyzed reactions involving CO <sub>3</sub> • (H <sub>2</sub> O) <sub>n</sub>
18:00	HERAEUS DINNER (social event with cold	& warm buffet with complimentary drinks)
20:00 – 21:00	Ludger Wöste	45 years of research on metal clusters
21:00	Scientific organizers	Closing words

### Friday, 04 October 2019

08:00 BREAKFAST

Departure