## Program

## 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 <br> cryogenic storage ring - from internal <br> cooling to merged-beam electron <br> collisions |
| 09:40-10:20 | Michael Martins | Supported clusters in the view of <br> X-rays |
| $10: 20-10: 40$ | COFFEE BREAK | Gert von Helden | | Spectroscopy of clusters in clusters |
| :--- |

12:00-12:10 Conference Photo (in the front of the lecture hall)

12:10 LUNCH

## Program

## 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 | Uptake and reactions of molecules on <br> clusters and free nanoparticles in <br> molecular beams |
| 19:30-20:10 | Michael Farnik | Optical cryogenic ion spectroscopy of <br> metalated flavin complexes |
| $20: 10-20: 30$ | David Müller |  |

## Program

## Tuesday, 01 October 2019

| 08:00 | BREAKFAST |
| :--- | :--- |
| 09:00-09:40 | Karl-Heinz <br> Meiwes-Broer |
| 09:40-10:20 | Lukas Bruder |

10:20 - 10:40 COFFEE BREAK

10:40-11:20 Ewald Janssens
$\begin{array}{ll}\text { 11:20-11:40 } & \text { Vlasta } \\ & \text { Bonačić-Koutecký }\end{array}$

11:40-12:00 Lutz Schweikhard

Charging, de-charging and detonation of metal clusters

Coherent nonlinear spectroscopy in the gas phase

Altering geometry, stability, and chemical reactivity of gold cluster cations by palladium doping

Tuning optical and catalytic properties of ligated noble metal clusters by synergistic role of metallic and organic subunits

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

## Program

## 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 | Vibronic spectroscopy with classical <br> trajectories |
| $20: 10-20: 30-20: 10$ | Oliver Kühn | Direct observation of cluster size <br> distributions during nucleation in <br> pulsed Laval expansions |
| $20: 30$ | Posters |  |

## Program

## 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 $\mathrm{LiX}_{2}^{-}\left(\mathrm{X}=\mathrm{Cl}^{-}, \mathrm{I}\right)$ 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 | Excursion (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 |  |

## Program

## Thursday, 03 October 2019

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

12:00
LUNCH

## Program

## 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 $\mathrm{Al}_{2} \mathrm{O}_{3}$ film grown on $\mathrm{Ni}_{3} \mathrm{Al}$ (111) crystal |
| 17:30-17:50 | Christian van der Linde | Electron catalyzed reactions involving $\mathrm{CO}_{3}{ }^{\bullet} \cdot\left(\mathrm{H}_{2} \mathrm{O}\right)_{n}$ |
| 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

