

## Monday, September 19, 2022

**8:30**      **Arrival & Registration**

**8:50**      **Welcome and Introduction**

**Non-Equilibrium Physics...**      **using new tools**

*Chair: Eckart Hasselbrink*

**9:00**      **Lars Breuer**  
On the path to ion based pump-probe: creation of ultra-short ion pulses

**9:30**      David Novoa (invited)  
Taming multi-octave-spanning ultrafast light using gas and glass

**10:10**      **Alexander Tarasevitch**  
Towards Table-Top Femtosecond Time-Resolved Soft X-Ray Spectroscopy

**10:40**      **Coffee Break**

**Non-Equilibrium Physics...**      **in two dimensions**

*Chair: Michael Horn-von Hoegen*

**11:10**      **André Schleife**  
Pre-equilibrium effects and dynamic charge state in ion-irradiated graphene

**11:40**      **Alexey Nikitin** (invited)  
Hyperbolic polaritons in van der Waals crystals

**12:20**      **Lunch Break**

*Chair: Andrea Eschenlohr*

**14:40**      **Christian Brand**  
Structural Dynamics at Surfaces Probed by Electron Diffraction

**15:10**      **Roberto D'Agosta** (invited)  
Straintronics: A Way to Control Response of 2D Materials

**15:50**      **Coffee Break**

*Chair: Jürgen König*

**16:20**      **Markus E. Gruner**  
Interface-induced concerted excitations in a metal/oxide heterostructure from RT-TDDFT

**16:50**      **Peter Kratzer**  
Fingerprints in the vibrational spectra of transition-metal dichalcogenides analyzed by first-principles calculations

**17:30**      **Poster Session I**

Tuesday, September 20, 2022

**Non-Equilibrium Physics...**

**in molecular matter**

*Chair: Martin Mittendorff*

**9:00 R. Kramer Campen**  
Probing Vibrationally Mediated Charge Transfer at the Gold/Water Interface in Real Time

**9:30 Eric Borguet** (invited)  
Solute vibrational relaxation probes the vibrational density of states at oxide/water interfaces

**10:10 Coffee Break**

*Chair: Katharina Ollefs*

**10:40 Till Reichenauer**  
Investigating the isomerization of Arylazopyrazole

**11:10 Maite Alducin** (invited)  
Unveiling the ultrafast vibrational dynamics of CO on surfaces

**Non-Equilibrium Physics...**

**of collective excitations**

**11:50 Uwe Bovensiepen**  
Dynamics of localized and propagating electronic excitations analyzed by femtosecond photoelectron spectroscopy

**12:20 Lunch Break**

*Chair: Björn Sothmann*

**14:40 Pascal Dreher**  
Ultrafast Coherent Hot Electron Dynamics in a Surface Plasmon Polariton Nano-Focus

**15:10 Giulia Tagliabue** (invited)  
Plasmonic Hot Carriers – Materials and Devices

**15:50 Poster Session II**

**18:30 Conference Dinner**

## Wednesday, September 21, 2022

### Non-Equilibrium Physics...

### of collective excitations

*Chair: Sebastian Schlücker*

- 9:00 Fabian Thiemann**  
Hot electron transport and transient optical properties in thin bismuth films
- 9:30 Rubén Esteban Llorente (invited)**  
Confining light down to the atomic scale with plasmonic excitations

**10:10 Coffee Break**

### Non-Equilibrium Physics...

### in one dimension

*Chair: Klaus Sokolowski-Tinten*

- 10:40 Axel Lorke**  
Space, time, and energy resolved electron dynamics in quantum dots
- 11.10 Eric Kleinherbers**  
Pushing the limits in real-time measurements of quantum dynamics
- 11:40 Thomas Frederiksen (invited)**  
Electron beam splitting with crossed graphene nanoribbons

**12:20 Lunch Break**

*Chair: Rossitza Pentcheva*

- 14:30 Gernot Schaller**  
Quantum Zeno Manipulation of Quantum Dots
- 15:00 Nikodem Szpak**  
Relaxation dynamics in quantum systems coupled to environment

**15:30 Conference Outing**

## Thursday, September 22, 2022

### Non-Equilibrium Physics...

in one dimension

*Chair: Marika Schleberger*

- 9:00**      **E.K.U. Gross**  
Non-adiabatic Dynamics from the Exact Factorization

### Non-Equilibrium Physics...

in three dimensions

- 9:30**      **Klaas-Jan Tielrooij** (invited)  
Ultrafast Dynamics in Quantum Materials

### 10:10      Coffee Break

*Chair: Yujin Tong*

- 10:40**      **Jeong Woo Han**  
Terahertz conductivity of nanograined bulk  $\text{Bi}_2\text{Te}_3$

- 11:10**      **Enrique Cánovas** (invited)  
Transient Dynamics In Silicon Monitored By Time Resolved THz Spectroscopy

- 11:50**      **Tobias Lojewski**  
Spectroscopic Analysis of the Ultrafast Non-Equilibrium Dynamics in Ni and NiO at the European X-Ray Free-Electron Laser

### 12:20      Lunch Break

*Chair: Frank Meyer zu Heringdorf*

- 14:30**      **Ulrich Lorenz** (invited)  
Electron diffraction of water in no man's land

- 15:10**      **Heiko Wende**  
Femtosecond Time-Resolved Soft X-Ray Spectroscopy for an Element Specific Analysis of Complex Materials

### 15:40      Coffee Break

### 16:00      Thanks, Poster Prizes

- 16:10**      **Poster Prize Winner Talks**