

## MONDAY, 02 March 2020

## Outward journey

- 08:00 Bus departure @ FU Berlin, Department of Physics (Arnimallee 14, 14195 Berlin)  
approx. 10:00 Bus departure @ ZOB Halle (Ernst-Kamieth-Straße, 06112 Halle)  
approx. 13:00 Arrival in Ostrov u Tisé  
13:00 - 14:50 *LUNCH & CHECK-IN*

## Session 1.1

Chair: Sang-Eun Lee

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|---------------|---------------------|---|
| 14:50 - 15:00 | USPM Organization   | <b>Welcome &amp; opening remarks</b>                                      |
| 15:00 - 15:40 | Wolf Widdra         | <b>NiO: Magnetic coupling and ultrafast electron dynamics at surfaces</b> |
| 15:40 - 16:00 | Yannic Behovits     | <b>Ultrafast spin dynamics in antiferromagnetic Mn<sub>2</sub>Au</b>      |
| 16:00 - 16:20 | <i>COFFEE BREAK</i> |   |

## Session 1.2

Chair: Yannic Behovits

- |               |                      |  |
|---------------|----------------------|--|
| 16:20 - 17:20 | Tomáš Jungwirth      | <b>Antiferromagnetic spintronics</b>                                 |
| 17:20 - 17:40 | Bikash Das Mohapatra | <b>Ultrafast electrical signals generation using fs-laser pulses</b> |
| 17:40 - 18:00 | Discussion           |  |
| 19:00 - 20:30 | <i>DINNER</i>        |  |

## Ice breaker session

- 20:30 - 22:00 Games, drinks & music

## TUESDAY, 03 March 2020

8:00 - 9:00 *BREAKFAST*

### Session 2.1

Chair: David Reiß

9:00 - 10:00	Bert Koopmans	<b>Femto-magnetism meets spintronics: Towards integrated magneto-photonics</b>
10:00 - 10:20	Reza Rouzegar	<b>Spin caloritronics at THz frequencies</b>
10:20 - 10:40	Sang-Eun Lee	<b>Ultrafast dynamics of itinerant and localized magnetic moments in antiferromagnetic GdRh<sub>2</sub>Si<sub>2</sub></b>
10:40 - 11:00	<i>COFFEE BREAK</i>	

### Session 2.2

Chair: Oliver Gueckstock

11:00 - 12:00	Alexey Kimel	<b>Counter-intuitive magnetism of antiferromagnetically coupled spins</b>
12:00 - 12:40	Clemens von Korff Schmising	<b>Spin dependent carrier dynamics studied by transient absorption spectroscopy in the extreme ultraviolet spectral range</b>
12:40 - 13:00	Discussion	
13:00 - 14:30	<i>LUNCH</i>	

### Session 2.3

Chair: Dominik Schulz

14:30 - 15:30	Miguel Marques	<b>Time-dependent density-functional theory: linear and non-linear regimes</b>
15:30 - 15:50	Qizhi Li	<b>Element specificity of transient extreme ultra-violet magnetic dichroism</b>
15:50 - 16:10	<i>COFFEE BREAK</i>	

### Session 2.4

Chair: Rouven Deyer

16:10 - 17:10	Michael Gensch	<b>A (superradiant) THz-view on low energy excitations in matter</b>
17:10 - 17:30	Discussion	
18:00 - 19:30	<i>DINNER</i>	

### Session 2.5

19:30 - 22:00 Poster session

## WEDNESDAY, 04 March 2020

8:00 - 9:00 *BREAKFAST*

### Session 3.1

Chair: Reza Rouzegar

9:00 - 10:00	Bärbel Rethfeld	<b>Describing non-equilibrium electron dynamics in itinerant ferromagnets</b>
10:00 - 10:20	David Reiß	<b>Theory of spin Hall magnetoresistance in the ac (THz) regime</b>
10:20 - 10:40	Martin Borchert	<b>Controlling of demagnetisation dynamics by DOS engineering</b>

10:40 - 11:00 *COFFEE BREAK*

### Session 3.2

Chair: Mathias Augstein

11:00 - 12:00	Matias Bargheer	<b>Ultrafast x-ray diffraction of magnetic heterostructures - Strain as trigger and sensor of spin dynamics</b>
12:00 - 12:20	Tim Amrhein	<b>Ferro- and Antiferromagnetism in Dysprosium</b>
12:20 - 12:40	Florian Jakobs	<b>Thermally induced magnetic switching in GdFeCo using picosecond laser pulses - Experiment vs Theory</b>

12:40 - 13:00 Discussion

13:00 - 14:30 *LUNCH*

### Social event

14:30 - 17:30 Hiking tour to the Tisa walls or to Sněžník

### Session 3.3

Chair: Sergey Trishin

17:30 - 18:10	Katharina Franke	<b>Monolayers of MoS<sub>2</sub> on Au(111): electronic properties and their potential as decoupling layers</b>
18:10 - 18:30	Wolfgang Hoppe	<b>Fast screening of THz current pulses in heavy metal/ferromagnet bilayers</b>
18:30 - 18:50	Denis Iagodin	<b>Ultrafast dynamics in TMDCs probed by THz spectroscopy</b>

19:00 - 20:30 *DINNER*

## THURSDAY, 05 March 2020

8:00 - 9:00 *BREAKFAST*

### Session 4.1

Chair: Maximilian Paleschke

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|---------------|-------------------------------------|---|
| 9:00 - 10:00  | Yves Acremann                       | <b>Femtosecond spin transport</b>   |
| 10:00 - 10:20 | Tomás Perie de Barros               | <b>The importance of Hubbard U on laser induced demagnetization</b>               |
| 10:20 - 10:40 | Rahil Hosseinifar                   | <b>Investigation of ultrafast toggle-switching and domain wall motion in GdFe</b> |
| 10:40 - 11:10 | <i>COFFEE BREAK &amp; CHECK-OUT</i> |   |

### Session 4.2

Chair: Dominic Lawrenz

- |               |                       |   |
|---------------|-----------------------|---|
| 11:10 - 12:10 | Waldemar Töws         | <b>Many-body theory of ultrafast magnetization dynamics in ferromagnetic transition metals: Insights into mechanisms of angular-momentum transfer</b> |
| 12:10 - 12:30 | Discussion / Feedback |   |
| 12:30 - 12:45 | USPM Organization     | <b>Closing remarks</b>  |
| 13:00 - 14:30 | <i>LUNCH</i>          |   |

### Return journey

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|---------------|----------------------------------|
| 14:30         | Bus departure from Ostrov u Tisé |
| approx. 17:15 | Arrival @ Hauptbahnhof Halle     |
| approx. 19:15 | Arrival @ FU Berlin              |

**Do not forget to vote for the best poster presentation**

## Poster presentations

1	Mathias Augstein	<b>Growth, Characterization and photoelectron spectroscopies on Fe/MgO(001) and Fe(001)</b>
2	Thomas Blank	<b>THz electric modulation of the magneto-optical Faraday effect</b>
3	Jan Böhnke	<b>Towards spin-resolved imaging in momentum microscopy for ultrafast spin dynamics</b>
4	Liane Brandt	<b>Exchange stiffness and damping of terahertz perpendicular standing spin waves in iron</b>
5	Francisco Javier Carrion Ruiz	<b>Spin, Time and Angle Resolved Photoelectron Spectroscopy</b>
6	Rouven Dreyer	<b>Non-linear spin-wave generation at low magnetic bias field</b>
7	Lukas Geiling	<b>Brillouin light scattering (BLS) setup for spin wave detection between 1 GHz and 2 THz</b>
8	O. Gueckstock & G. Bierhance	<b>Ultrafast magnon currents in <math>\gamma</math>-Fe<sub>2</sub>O<sub>3</sub> and Fe<sub>3</sub>O<sub>4</sub> &amp; electro-optical THz analyzer</b>
9	Albert Hönemann	<b>Edelstein effect and spin-orbit torque in ferromagnetic/nonmagnetic heterostructures</b>
10	Robin Kamrta	<b>Double photoemission spectroscopy with MHz high-order harmonics</b>
11	Jozef Kimák	<b>Investigation of magnetic and magneto-optical anisotropy of ferromagnetic thin films</b>
12	Abhijeet Kumar	<b>Ultrafast dynamics of charges and spins in Transition Metal Dichalcogenides</b>
13	I. Kumberg & J. Gördes	<b>Time-resolved X-ray magnetic circular dichroism on Ni/NiMn and Co/NiMn bilayers</b>
14	Dominic Lawrenz	<b>Static and dynamic demagnetization of MBE grown Fe/Gd films on W(110) investigated with XMCD-R</b>
15	Maximilian Mattern	<b>Picosecond strain dynamics driven by Ultrafast Demagnetization in Dysprosium</b>
16	Maximilian Paleschke	<b>Setup for time-resolved photoemission electron microscopy of ferromagnetic surfaces and magnetization dynamics triggered by back-side illumination</b>
17	Ricardo Rama-Eiroa	<b>Inertial domain wall motion driven by staggered spin-orbit fields in uncompensated antiferromagnets</b>
18	Dominik Schulz	<b>Generation of high harmonics in correlated and spin-orbit coupled electronic systems</b>
19	Christopher Seibel	<b>Influence of substrates on the demagnetization dynamics of Nickel</b>
20	F. Steinbach & K. Yao	<b>All-optical switching with patterned excitation - probed in the optical and XUV range</b>
21	Franziska Töppler	<b>A real-space tight-binding approach to model ultrafast spin dynamics</b>
22	Sergey Trishin	<b>Magnetic nanostructures on MoS<sub>2</sub></b>
23	Alexander von Reppert	<b>Finite size effects on the ultrafast remagnetization- and lattice dynamics of FePt</b>
24	Huijuan Xiao	<b>Spin transport in layered magnetic systems by time- and spin-dependent photoelectron spectroscopy</b>
25	Asieh Yousofnejad	<b>Electronic Structure of Organic Molecules on Single-Layer MoS<sub>2</sub>/Ag(111)</b>
26	Daniela Zahn	<b>Lattice dynamics of 3d and 4f ferromagnets</b>
27	Xinwei Zheng	<b>XUV tr-ARPES to investigate lanthanide magnetization dynamics</b>