CONFERENCES, WORKSHOPS, SEMINARS IN 2018-2023

Total number of invited talks: 40

2018

- **1.** Focus Session "Structural Dynamics in Nanoscale Materials Probed by Ultrashort Electron Pulses" at the Spring Meeting of the German Physical Society (DPG), 11-16 March 2018, Berlin, Germany Invited talk on: "Efficient simulation scheme for propagation of energetic electrons in solids."
- **2.** Talk at the Bremen Center for Computational Materials Science, 2018, University of Bremen, Bremen, Germany

Invited talk on: "Transitions in matter induced by intense X-ray radiation and their diagnostics"

- **3.** The Joint ICTP-IAEA School and Workshop on Fundamental Methods for Atomic, Molecular and Materials Properties in Plasma Environments, 16-20 April 2018, ICTP Trieste, Italy Invited talk on: "Solids underway to warm dense matter state"
- **4.** ICTP school on Synchrotron and FEL applications, ICTP Trieste, 7-19 May 2018, Trieste, Italy. Invited talk on: "Ultrafast transformations in matters induced by intense coherent radiation"
- **5.** The 10th International Workshop on X-ray Damage to Biological Samples (RD10), 13-14 September 2018, Brookhaven National Laboratory, Long Island, USA,

Invited talk on: "Femtosecond decay of sulfur dimer within irradiated thaumatin crystal as a signature of complex X-ray induced ionization dynamics"

6. EUCALL Workshop, ELI-ALPS, 1-6 July 2018, Szeged, Hungary.

Invited talk on: "Ultrafast transformations in matter induced by intense X-ray radiation"

- **7.** COST Meeting, Action CA17126, "The First General Meeting", 19-20 November 2018, Madrid, Spain. Invited talk on: "Short- and long-timescale spatially-resolved distribution of energy absorbed in bulk materials after their X-ray irradiation" → transferred to a postdoctoral collaborator, V. Lipp
- 8. Photon-Science Meeting, 17 October 2018, DESY, Hamburg, Germany

Invited talk on: "Ultrafast transformations in matter induced by intense X-ray radiation"

9. Photon Science Day, 21 November 2018, DESY, Hamburg, Germany.

Invited talk on: "New prospects for simulations of X-ray irradiated complex materials with in-house code XTANT"

10. Conference SPAS'18, 27-30 November 2018, INP, Krakow, Poland Invited talk on: "X-ray free-electron lasers - status and applications"

2019

- **11.** 6th Ringberg Workshop on Structural Biology with FELs: Feb 27-March 2, 2019, Tegernsee, Germany Invited talk on:"Femtosecond dissociation of disulfide bridges within X-ray irradiated thaumatin crystal"
- 12. 10th Ringberg Workshop on Science with FELs: Feb 24-27, 2019, Tegernsee, Germany

Invited talk on: "Femtosecond dissociation of disulfide bridges within X-ray irradiated protein crystals – part II"

- **13.** 10th International Workshop on Warm-Dense-Matter, 5-9 May 2019, Travemuende, Germany Invited talk on:"Electron kinetics induced by X-ray FEL excitation within Au thin layer"
- 14. DESY Photon Science Days 2019, 27-28 May, Jesteburg, Germany

Invited talk on: "Modeling of X-ray induced spin processes in complex magnetic materials"

15. SPIE Optics + Optoelectronics, "Optics Damage and Materials Processing by EUV/X-ray Radiation (XDam7), 1 - 4 April 2019, Prague, Czech Republic

Invited talk on:" X-ray-induced damage of B4C-coated bilayer materials under various irradiation geometries"

16. "Ultrafast Science and Technology (USTS) 2019" Meeting, 6-8.11.19, Instituto IMDEA Nanociencia, University of Madrid, Madrid, Spain,

Contributed talk on: "Transitions in X-ray irradiated solid materials".

- **17.** ICTP 'School on Advanced Light Sources: Principles, Methods and Multidisciplinary Applications Invited lecture on "Ultrafast transformations in matter induced by intense X-ray radiation", 29 April 20, Trieste, Italy postponed due to pandemia
- **18.** Elletra Colloquium, 11 June 2020, Trieste, Italy

Invited talk on: "Electronic, structural and magnetic transitions in X-ray irradiated solid materials" - on-line due to pandemia

- **19**. Workshop on "Ultrafast dynamics of correlated electrons in solids", May 6-8 2020, Hamburg Invited talk on: "Electronic, structural and magnetic transitions in X-ray irradiated solid materials" on-line due to pandemia
- **20.** Sixth International Conference "Dynamics of Systems on the Nanoscale" (DySoN 2020), 23-27 November 2020, Italy → relocated to October 2021

Invited talk on: "Transitions in matter induced by intense X-ray radiation and their diagnostics."

21. Meeting of the COST Action 17126 TUMIEE, 17-18 February 2020, Warsaw, Poland Contributed talk: "Time-resolved investigation of the optical phase change as a potential diagnostics tool for XUV FEL pump - optical probe experiments"

2021

- **22.** 21st International Conference on Atomic Processes in Plasmas, 12 16 April 2021, Vienna, Austria Invited talk. → relocated to 2023.
- **23.** Invited talk at the Seminar Series of Department of Structure Research of Condensed Matter, April 2021 IFJ PAN, Krakow, Poland .
- **24.** International Conference on Photonics Research, October 14-20, 2020, Turkey Invited talk regretfully declined.
- 25. DESY Photon Science Meeting, February 2021, DESY Hamburg

Invited talk on: "Electronic, structural and magnetic transitions in X-ray irradiated solids".

26. IFJ PAN, Workshops "XFEL for beginners", 27-28.04.21, Krakow, Poland

Invited talk on: "How ultrashort intense X-ray pulses can be used to modify materials."

27. Ninth International Conference on Radiation in Various Fields of Research (RAD 2021), Contributed talk on: "Electronic, structural and magnetic transitions in X-ray irradiated solid materials", June 2021.

28. MLL RT1 Workshop July 7-8, 2021, DESY, Hamburg.

Invited talk on: "Limitations of Structural Insight into Ultrafast Transitions of Solid Materials with X-ray Diffraction Imaging".

29. "Symposium on Spintronics and Quantum Information.", University of Poznan, Poland.

Invited talk on: "Transitions in matter induced by intense X-ray radiation and their diagnostics".

30. NZ33 Seminar, IFJ PAN, Krakow, Poland.

Contributed talk on: "Limitations of Structural Insight into Ultrafast Transitions of Solid Materials with X-ray Diffraction Imaging"

31. Invited talk at the Seminar Series of NO1, IFJ PAN, Krakow, Poland.

Topic: "Transitions in matter induced by intense X-ray radiation and their diagnostics".

32. German Physical Society Meeting, section Short Time Physics, 2.09.21, Germany.

Contributed talk on: "Modeling of ultrafast X-ray induced demagnetization in magnetic materials".

2022

- **33.** 15th Pacific Rim Conference on Lasers and Electrooptics, Sapporo, 31.07-5.08.22, Japan Invited talk on: "Theoretical studies of X-ray induced damage in optical elements of beamlines at free-electron-laser facilities"
- **34.** Radiative Properties of Hot Dense Matter 2022, Santa Fe, 14-18.11.2022, USA Invited talk on: "Structural and magnetic transitions in solid materials induced by intense X-ray radiation."

35. Workshop on Multiscale Modeling of Matter under Extreme Conditions, Görlitz, 11.09 -16.09.22 Germany

Invited talk on: "Transitions in matter induced by intense X-ray radiation and their diagnostics"

36. MML RT1-Workshop, Hamburg, 8.11-9.11.22, Germany

Invited talk on: "Modeling of X-ray heated materials underway to warm dense matter and plasma state"

37. Meeting of the COST Action 17126 TUMIEE, Prague, 28-29.04.22, Czech Republic

Contributed talk : "Role of electronic processes for X-ray induced ultrafast demagnetization within magnetic multilayer system"

38. EuXFEL X-ray Optics Seminar, Hamburg, 11.05.22, Germany

Invited talk: "Nanosecond dynamics of X-ray irradiated materials and its implications for X-ray diagnostics and optics", talk shared with V. Lipp.

2023

- **39.** 21st International Conference on Atomic Processes in Plasmas, Vienna, 15-19 May 2023, Austria Invited talk on: "Modelling the evolution of X-ray free-electron-laser irradiated solids towards warm-dense-matter state"
- **40.** Invited talk at 11th International Symposium "Atomic Cluster Collisions" (ISACC 2023), 20-22 July, 2023, Hveragerði, Iceland regretfully declined.
- **41.** 4th Science Workshop of the Program MML -23, Jena, 27-29 September 2023, Germany. Invited talk on: "Development and validation of modeling software SURFwiX to guide high-precision X-ray machining of materials.", shared with V. Lipp.
- **42.** Invited talk at 4th International Conference on Nanomaterials, Nanofabrication and Nanocharacterization (NANOMACH), 13-19 April 2023, Fethiye / Mugla, Turkey regretfully declined.
- **43.** 12th Ringberg Workshop on Science with FELs, Ringberg, 5-8 February 2023, Germany Invited talk on: "Modeling of ultrafast X-ray induced magnetization dynamics in magnetic materials"
- **44.** Workshop "Theory Days 2023: Advances in Stochastic and Disspipative Effects", 29-30 November 2023, Toulouse, France

Invited talk on: "Application of Boltzmann kinetic equations for modelling X-ray-created warm dense matter and plasma"

- **45.** Invited talk at 10th meeting of the Asia Pacific Association of Theoretical and Computational Chemists, APATCC-10, 19-23.02.23, Ouv Nhon, Vietnam regretfully declined
- **46.** Workshop "XFEL for Beginners", 11-13 October 2023, Krakow, Poland Invited lecture on :"Modeling of XFEL matter interaction"
- **47.** 7th International Conference "Dynamics of Systems on the Nanoscale" (DySoN 2023), Prague, 24-26 April 2023, Czech Republic

Contributed talk on: "Femtosecond dissociation of disulfide bridges within X-ray irradiated thaumatin crystal"

48. 11th International workshop on WDM 2023, 25-30 June 2023, Awaji Island, Japan

Contributed talk on : "Development and validation of modeling software SURFwiX to guide high-precision processing of materials of industrial relevance"

49. Seminar of NO3, IFJ PAN, Krakow, 28.03.2023, Poland

Topic: "Transient Absorption of Warm Dense Copper created by an X-Ray Free-Electron Laser"

50. Polish-German WE-Heraeus Seminar and Max Born Symposium on "Many-particle systems under extreme conditions", Görlitz, 3.-6 December 2023.

Invitation to participate - regretfully declined.

51. 12th Ringberg Workshop on Science with FELs, Ringberg, 5-8 February 2023, Germany Invitation to participate in discussion session: "Discussion on theory - experiment interaction within ultrafast X-ray science "