Curriculum Vitae

Personal information

Full name	Diego Andrés Zocco
Place of birth	Buenos Aires, Argentina
Nationality	Argentine, Polish (naturalized in 2011)
E-mail	diego.zocco@tuwien.ac.at, dzocco@gmail.com

Education

2011	PhD Physics, University of California San Diego, USA Advisor: Prof. M. Brian Maple
2006	MS Physics, University of California San Diego, USA
2003	MS Physics, University of Buenos Aires, Argentina

Current position and affiliation

Position	University and Project Assistant; Project Leader (since 01.2019)
Institution	Institute of Solid State Physics, Vienna University of Technology (TU Wien)
Address	Wiedner Hauptstr. 8-10/138, 1040 Vienna, Austria
Telephone	+43 1 58801-138762
Website	https://www.tuwien.at/phy/ifp https://www.ifp.tuwien.ac.at/forschung/projekte/fwf-exsoc

Previous research appointments

2011 – 2016	Postdoctoral Researcher, Karlsruhe Institute of Technology, Germany IQMT New Materials and Thermodynamics group, and Neutron Scattering group
2006 – 2011	Research Assistant, University of California San Diego, USA
2004 – 2005	Research Assistant, National High Magnetic Field Laboratory (MPA-NHMFL) Los Alamos National Laboratory, USA
2002 – 2004	Research Assistant, Physics Department, University of Buenos Aires, Argentina

Main areas of research

- Strongly correlated electron systems, quantum phase transitions, heavy fermion compounds, Kondo phenomena, unconventional superconductivity, charge density waves.
- Correlation-driven topological insulators and Weyl semimetals.
- Low temperature physics, high pressures, high magnetic fields, stress/strain dependences, single crystals synthesis and characterization, elastic and inelastic x-ray and neutron scattering

Scientific output

- 40+ publications in peer-reviewed international scientific journals and conference proceedings
- 20+ invited talks at international conferences/workshops/seminars/colloquia
- ORCID: 0000-0002-6958-0416
- h-index = 20 on Google Scholar, 17 on Web of Science/ResearcherID (O-3440-2014)

Funding

- Project title: *Driving spin-orbit coupling to the extreme*
  Agency: Austrian Science Fund (FWF)
  Role: Principal investigator
  Duration: 01.2019 – 06.2023
  Amount: €351,550.50
  Website: www.ifp.tuwien.ac.at/forschung/projekte/fwf-exsoc

Participated in organizing and writing sections of the following grant proposals and reports:

- Proposals: U.S. DOE-NNSA/SSAA (2008), U.S. DOE (2009), U.S. CDAC Carnegie DOE Alliance Center (2010) (PI: M. B. Maple)
- Reports: U.S. DOE-NNSA/SSAA annual reports (2008, 2009), U.S. DOE final report (2008, 2010), U.S. NSF annual report (2009) (PI: M. B. Maple); Austrian FWF *TopQuantum* annual reports (2016, 2017, 2018) and final report (2019) (PI: S. Paschen)

List of recent collaborators

S. Paschen, A. Prokofiev, E. Bauer (TU Vienna); M. B. Maple (UC San Diego); K. Grube, F. Weber, R. Heid, T. Wolf, H. v. Löhneysen (Karlsruhe Institute of Technology); M. Jaime, R. D. McDonald, F. Weickert, V. Zapf (LANL high-field facility); A. McCollam (Nijmegen high-field facility); I. R. Fisher (Stanford); G. Garbarino (ESRF, Grenoble); M. G. Vergniory (MPI CPfS/Donostia), C. Felser (MPI CPfS); J. Custers (Charles University, Prague); T. Shibauchi (U. Tokyo); Q. Si (Rice University).

Peer-review activities

- Regular reviewer for Nature Communications, Physical Review Letters, Physical Review X, Physical Review B, and Proceedings of the National Academy of Sciences
- Deutsche Forschungsgemeinschaft (German Research Foundation): Individual Grants

Supervision activities

Co-supervised with Prof. Silke Paschen (Vienna): PhD (current), Master's (2021), and Bachelor's (2018) theses of Diana Kirschbaum, Project work of Mathias Pelz (2021), Master's thesis of Lukas Cvitkovich (2019); with Dr. Kai Grube (Karlsruhe): PhD thesis of Felix Eilers (2014); with Prof. M. Brian Maple (San Diego): students Noravee Kanchanavatee, Kevin Huang, Eileen Gonzalez, Nicole Crisosto, and Xiao Chen.

Teaching appointments

2017 – 2023	University Assistant, Vienna University of Technology, Austria
2014	Teaching Assistant, Karlsruhe Institute of Technology, Germany
2005 – 2007	Teaching Assistant, University of California San Diego, USA
2001 – 2004	Teaching Assistant/Lecturer, University of Buenos Aires, Argentina

Scholarships and awards

2011	Karlsruhe Institute of Technology Postdoctoral Scholarship, Germany
2006	Teaching Assistant Excellence Award, UC San Diego, USA
2004	Graduate Scholarship, National Research Council (CONICET), Argentina
2003	Instituto Balseiro Scholarship, Centro Atómico Bariloche, Argentina
2002	MS Dissertation Scholarship, University of Buenos Aires, Argentina

Technical expertise

- **Low temperatures**: Extensive experience measuring electrical transport, magnetic, and thermodynamic properties in dilution refrigerators (DR) at various institutions (LANL, UCSD, KIT, TUW) with up to 20 T superconducting magnets, and with commercial ^{3}He PPMS and SQUID systems, and custom-built ^{4}He refrigerator systems
- **Materials characterization**: Electrical transport, Hall effect, magnetic susceptibility, torque magnetometry, Faraday magnetometry, heat capacity, thermal expansion, magnetostriction, powder and single crystal x-ray diffraction, Rietveld refinement
- **High pressures**: Extensive experience in the preparation of high pressure cells (hydrostatic clamps, Bridgman-anvil, diamond-anvil cells) for measurements of electrical resistivity, ac-magnetic susceptibility, ac-calorimetry (UCSD, TUW), and for elastic and inelastic x-ray scattering experiments at synchrotron user facilities (ESRF, Argonne)
- **High magnetic field laboratories/user facilities**:
  - 1 year full-time appointment at the National High Magnetic Field Lab, Los Alamos, USA
  - Expertise preparing proposals and performing experiments at various dc- and pulsed-field user facilities (Los Alamos, Tallahassee, Nijmegen) for torque magnetometry, magnetotransport, magnetization, dHvA and magnetostriction
- **X-ray & neutron scattering**: 3.5 years full-time appointment at the KIT-IQMT neutron scattering group
  - Expertise in x-ray and neutron scattering experiments at various user facilities: x-ray synchrotrons at ESRF-Grenoble (elastic and inelastic + high pressures) and APS-Argonne (inelastic + high pressures), neutron sources at LLB-Saclay, NCNR-NIST and SNS-Oak Ridge
  - Installation, optimization and use of a 4-circle x-ray diffractometer (Huber) equipped with Cu and Mo tube sources and graphite and germanium monochromators, for temperature-dependent measurements (5-800 K) with a closed-cycle cryostat (ARS)
- **Materials synthesis**: Single- and poly-crystalline bulk material synthesis: solid state reaction, molten-flux [filled skutterudites $(Nd,Ce)_{1-x}La_xRu_4Sb_{12}$, $CuFeTe_2$], Czochralski growth in multi-arc furnace [URu_2Si_2, UCoGe]; experience with glass bench (quartz/pyrex)
- **Computers and electronics**: Vast experience in LabView programming for data acquisition systems, basic working knowledge of programming in Python

Languages

English, Spanish, German (advanced, B2 level)

Publications

h-index = 20 on Google Scholar, 17 on Web of Science/ResearcherID (O-3440-2014)

Five most relevant publications marked with (***)

43. (***) *Emergent Topological Semimetal*
D. M. Kirschbaum, L. Chen, D. A. Zocco, H. Hu, F. Mazza, J. Larrea Jiménez, A. M. Strydom, D. Adroja, X. Yan, A. Prokofiev, Q. Si, and S. Paschen
arXiv:2404.15924 (2024), DOI: 10.48550/arXiv.2404.15924

42. (***) *The new heavy fermion compound $Ce_3Bi_4Ni_3$*
D. M. Kirschbaum, X. Yan, M. Waas, R. Svagera, A. Prokofiev, B. Stöger, P. Rogl, D.-G. Oprea, C. Felser, R. Valentí, G. Vergniory, J. Custers, S. Paschen, and D. A. Zocco
Phys. Rev. Research **6**, 023242 (2024), DOI: 10.1103/PhysRevResearch.6.023242

41. (***) *Control of electronic topology in a strongly correlated electron system*
S. Dzsaber, D. A. Zocco, A. McCollam, F. Weickert, R. McDonald, M. Taupin, X. Yan, A. Prokofiev, L. M. K. Tang, B. Vlaar, L. E. Winter, M. Jaime, Q. Si, and S. Paschen
Nat. Commun. **13**, 5729 (2022), DOI: 10.1038/s41467-022-33369-8

40. *A Knudsen cell approach for the molecular beam epitaxy of the heavy fermion compound $YbRh_2Si_2$*
E. Bakali, W. Artner, M. Beiser, J. Bernardi, H. Detzce, G. Eguchi, A. Foelske, M. Giparakis, C. Herzig, A. Limbeck, H. Nguyen, L. Prochaska, A. Prokofiev, M. Sauer, S. Schwarz, W. Schrenkc, G. Strasser, R. Svagera, M. Taupin, A. S. Thirsfeld, M. Waas, X. Yan, D. A. Zocco, A. M. Andrews, and S. Paschen
Journal of Crystal Growth **595**, 126804 (2022), DOI: 10.1016/j.jcrysgro.2022.126804

39. *Anisotropic physical properties of the Kondo semimetal $CeCu_{1.11}As_2$*
L. Cvitkovich, D. A. Zocco, G. Eguchi, M. Waas, R. Svagera, B. Stöger, R. Mondal, A. Thamizhavel, and S. Paschen
JPS Conf. Proc. **30**, 011020 (2020), DOI: 10.7566/JPSCP.30.011020

38. *Electron-phonon coupling and superconductivity-induced distortion of the phonon lineshape in V_3Si*
A. Sauer, D. A. Zocco, A. H. Said, R. Heid, A. Böhmer, and F. Weber
Phys. Rev. B **99**, 134511 (2019), DOI: 10.1103/PhysRevB.99.134511

37. *Competing soft phonon modes at the charge-density-wave transitions in $DyTe_3$*
M. Maschek, D. A. Zocco, S. Rosenkranz, R. Heid, A. H. Said, A. Alatas, P. Walmsley, I. R. Fisher, and F. Weber
Phys. Rev. B **98**, 094304 (2018), DOI: 10.1103/PhysRevB.98.094304

36. *Determining the local low-energy excitations in the Kondo semimetal $CeRu_4Sn_6$ using resonant inelastic x-ray scattering*
A. Amorese, K. Kummer, N. B. Brookes, O. Stockert, D. T. Adroja, A. M. Strydom, A. Sidorenko, H. Winkler, D. A. Zocco, A. Prokofiev, S. Paschen, M. W. Haverkort, L. H. Tjeng, and A. Severing
Phys. Rev. B **98**, 081116(R) (2018) (Rapid Communications), DOI: 10.1103/PhysRevB.98.081116

35. *Superconductivity and hybrid soft modes in $TiSe_2$*
M. Maschek, S. Rosenkranz, R. Hott, R. Heid, D. A. Zocco, A. H. Said, A. Alatas, G. Karapetrov, S. Zhu, J. van Wezel, and F. Weber
Phys. Rev. B **94**, 214507 (2016), DOI: 10.1103/PhysRevB.94.214507

34. *Strain-Driven Approach to Quantum Criticality in AFe_2As_2 with $A = K$, Rb, and Cs*
F. Eilers, K. Grube, D. A. Zocco, T. Wolf, M. Merz, P. Schweiss, R. Heid, R. Eder, R. Yu, J.-X. Zhu, Q. Si, T. Shibauchi, and H. v. Löhneysen
Phys. Rev. Lett. **116**, 237003 (2016), DOI: 10.1103/PhysRevLett.116.237003

33. *Evolution of quasiparticle excitations with critical mass enhancement in superconducting AFe_2As_2 ($A = K$, Rb, and Cs)*
Y. Mizukami, Y. Kawamoto, Y. Shimoyama, S. Kurata, H. Ikeda, T. Wolf, D. A. Zocco, K. Grube, H. v. Löhneysen, Y. Matsuda, and T. Shibauchi
Phys. Rev. B **94**, 024508 (2016), DOI: 10.1103/PhysRevB.94.024508

32. *Lattice dynamical properties of superconducting $SrPt_3P$ studied via inelastic x-ray scattering and density functional perturbation theory*
D. A. Zocco, S. Krannich, R. Heid, K.-P. Bohnen,T. Wolf, T. Forrest, A. Bossak, and F. Weber
Phys. Rev. B **92**, 220504(R) (2015) (Rapid Communications), DOI: 10.1103/PhysRevB.92.220504

31. (***) *Pressure dependence of the charge-density-wave and superconducting states in $GdTe_3$, $TbTe_3$ and $DyTe_3$*
D. A. Zocco, J. J. Hamlin, K. Grube, J. -H. Chu, H. -H. Kuo, I. R. Fisher, and M. B. Maple
Phys. Rev. B **91**, 205114 (2015), DOI: 10.1103/PhysRevB.91.205114

30. *Fermi Surface of KFe_2As_2 from Quantum Oscillations in Magnetostriction*
D. A. Zocco, K. Grube, F. Eilers, T. Wolf, and H. v. Löhneysen
JPS Conf. Proc. **3**, 015007 (2014), DOI: 10.7566/JPSCP.3.015007

29. *Persistent non-metallic behavior in Sr_2IrO_4 and $Sr_3Ir_2O_7$ at high pressures*
D. A. Zocco, J. J. Hamlin, B. D. White, B. J. Kim, J. R. Jeffries, S. T. Weir, Y. K. Vohra, J. W. Allen, and M. B. Maple
J. Phys.: Condens. Matter **26**, 255603 (2014), DOI: 10.1088/0953-8984/26/25/255603

28. *Probing the superconductivity of $PrPt_4Ge_{12}$ through Ce substitution*
K. Huang, L. Shu, I. K. Lum, B. D. White, M. Janoschek, D. Yazici, J. J. Hamlin, D. A. Zocco, P.-C. Ho, R. E. Baumbach, and M. B. Maple
Phys. Rev. B **89**, 035145 (2014), DOI: 10.1103/PhysRevB.89.035145

27. (***) *Pauli-Limited Multiband Superconductivity in KFe_2As_2*
D. A. Zocco, K. Grube, F. Eilers, T. Wolf, and H. v. Löhneysen
Phys. Rev. Lett. **111**, 057007 (2013), DOI: 10.1103/PhysRevLett.111.057007

26. *Ferromagnetic quantum critical point in $UCo_{1-x}Fe_xGe$*
K. Huang, J. J. Hamlin, R. E. Baumbach, M. Janoschek, N. Kanchanavatee, D. A. Zocco, F. Ronning, and M. B. Maple
Phys. Rev. B **87**, 054513 (2013), DOI: 10.1103/PhysRevB.87.054513

25. *High pressure transport studies of the LiFeAs analogues $CuFeTe_2$ and Fe_2As*
D. A. Zocco, D. Y. Tütün, J. J. Hamlin, J. R. Jeffries, S. T. Weir, Y. K. Vohra, and M. B. Maple
Supercond. Sci. Technol. **25**, 084018 (2012), DOI: 10.1088/0953-2048/25/8/084018

24. *Intrinsic dependence of T_c on hydrostatic (He-gas) pressure for superconducting LaFePO, PrFePO, and NdFePO single crystals*
N. J. Hillier, N. Foroozani, D. A. Zocco, J. J. Hamlin, R. E. Baumbach, I. K. Lum, M. B. Maple, and J. S. Schilling
Phys. Rev. B **86**, 214517 (2012), DOI: 10.1103/PhysRevB.86.214517

23. *High-pressure study of non-Fermi liquid and spin-glass-like behavior in CeRhSn*
D. A. Zocco, A. Ślebarski, and M. B. Maple
J. Phys.: Condens. Matter **24**, 275601 (2012), DOI: 10.1088/0953-8984/24/27/275601

22. *Superconductivity, spin and charge order, and quantum criticality in correlated electron materials*
M. B. Maple, J. J. Hamlin, D. A. Zocco, M. Janoschek, R. E. Baumbach, B. D. White, I. R. Fisher and J.-H. Chu
EPJ Web of Conferences **23**, 00012 (2012), DOI: 10.1051/epjconf/20122300012

21. *High pressure transport properties of the topological insulator Bi_2Se_3*
J. J. Hamlin, J. R. Jeffries, N. P. Butch, P. Syers, D. A. Zocco, S. T. Weir, Y. K. Vohra, J. Paglione, and M. B. Maple
J. Phys.: Condens. Matter **24**, 035602 (2012), DOI: 10.1088/0953-8984/24/3/035602

20. *Twofold enhancement of the hidden-order/large-moment antiferromagnetic phase boundary in the $URu_{2-x}Fe_xSi_2$ system*
N. Kanchanavatee, M. Janoschek, R. E. Baumbach, J. J. Hamlin, D. A. Zocco, K. Huang, and M. B. Maple
Phys. Rev. B **84**, 245122 (2011), DOI: 10.1103/PhysRevB.84.245122

19. *Low temperature electrical resistivity of praseodymium at pressures up to 120 GPa*
J. J. Hamlin, J. R. Jeffries, G. Samudrala, Y. K. Vohra, S. T. Weir, D. A. Zocco, and M. B. Maple
Phys. Rev. B **84**, 033101 (2011), DOI: 10.1103/PhysRevB.84.033101

18. *Interplay of Superconductivity, Magnetism, and Density Waves in Rare-Earth Tritellurides and Iron-Based Superconducting Materials*
D. A. Zocco, PhD Dissertation, Department of Physics, University of California San Diego (UMI Dissertations Publishing, 2011), ProQuest Dissertations Publishing 2011.3466798

17. *Correlated electron state in $Ce_{1-x}Yb_xCoIn_5$ stabilized by cooperative valence fluctuations*
L. Shu, R. E. Baumbach, M. Janoschek, E. Gonzales, K. Huang, T. A. Sayles, J. P. Paglione, J. R. O'Brien, J. J. Hamlin, D. A. Zocco, P.-C. Ho, C. A. McElroy, and M. B. Maple
Phys. Rev. Lett. **106**, 156403 (2011), DOI: 10.1103/PhysRevLett.106.156403

16. *Search for pressure induced superconductivity in CeFeAsO and CeFePO iron pnictides*
D. A. Zocco, R. E. Baumbach, J. J. Hamlin, M. Janoschek, I. K. Lum, M. A. McGuire, A. S. Sefat, B. C. Sales, R. Jin, D. Mandrus, J. R. Jeffries, S. T. Weir, Y. K. Vohra, and M. B. Maple
Phys. Rev. B **83**, 094528 (2011), DOI: 10.1103/PhysRevB.83.094528

15. *Unconventional T-H Phase Diagram in the Noncentrosymmetric Compound $Yb_2Fe_{12}P_7$*
R. E. Baumbach, J. J. Hamlin, L. Shu, D. A. Zocco, J. R. O'Brien, P.-C. Ho, and M. B. Maple
Phys. Rev. Lett. **105**, 106403 (2010), DOI: 10.1103/PhysRevLett.105.106403

14. *Signatures of pressure induced superconductivity in insulating Bi2212*
T. Cuk, D. A. Zocco, H. Eisaki, V. Struzhkin, M. Grosche, M. B. Maple, and Z.-X. Shen
Phys. Rev. B **81**, 184509 (2010), DOI: 10.1103/PhysRevB.81.184509

13. *The pressure-temperature phase diagram of URu_2Si_2 under hydrostatic conditions*
N. P. Butch, J. R. Jeffries, W. J. Evans, S. X. J. Chi, J. B. Leao, J. W. Lynn, S. V. Sinogeikin, J. J. Hamlin, D. A. Zocco, M. B. Maple
Mater. Res. Soc. Symp. Proc. **1264**, Warrendale, PA, 2010 (2010 MRS Spring), DOI: 10.1557/PROC-1264-Z10-03

12. *Evolution of Magnetic and Superconducting States in UCoGe With Fe and Ni Substitution*
J. J. Hamlin, R. E. Baumbach, K. Huang, M. Janoschek, N. Kanchanavatee, D. A. Zocco, and M. B. Maple
Mater. Res. Soc. Symp. Proc. **1264**, Warrendale, PA, 2010 (2010 MRS Spring), DOI: 10.1557/PROC-1264-Z12-04

11. *Pressure induced superconductivity in the charge density wave compound $TbTe_3$*
J. J. Hamlin, D. A. Zocco, T. A. Sayles, M. B. Maple, J. -H. Chu and I. R. Fisher
Phys. Rev. Lett. **102**, 177002 (2009), DOI: 10.1103/PhysRevLett.102.177002

10. *High-pressure, transport, and thermodynamic properties of $CeTe_3$*
D. A. Zocco, J. J. Hamlin, T. A. Sayles, M. B. Maple, J. -H. Chu and I. R. Fisher
Phys. Rev. B **79**, 134428 (2009), DOI: 10.1103/PhysRevB.79.134428

9. *Hydrostaticity and hidden order: effects of experimental conditions on the temperature-pressure phase diagram of URu_2Si_2*
N. P. Butch, J. R. Jeffries, D. A. Zocco, and M. B. Maple
High Pressure Res. **29**, Issue 2, 335-343 (2009), DOI: 10.1080/08957950802564676

8. *Superconductivity in LnFePO (Ln = La, Pr, and Nd) single crystals*
R. E. Baumbach, J. J. Hamlin, L. Shu, D. A. Zocco, N. Crisosto, and M. B. Maple
New J. Phys. **11**, 025018 (2009), DOI: 10.1088/1367-2630/11/2/025018

7. *New correlated electron physics from new materials*
M. B. Maple, R. E. Baumbach, J. J. Hamlin, D. A. Zocco, B. J. Taylor, N. P. Butch, J. R. Jeffries, S. T. Weir, B. C. Sales, D. Mandrus, M. A. McGuire, A. S. Sefat, R. Jin, Y. K. Vohra, J. -H. Chu, and I. R. Fisher
Physica B **404**, 2924 (2009), DOI: 10.1016/j.physb.2009.07.141

6. *Superconductivity in single crystals of LaFePO*
J. J. Hamlin, R. E. Baumbach, D. A. Zocco, T. A. Sayles, and M. B. Maple
J. Phys.: Condens. Matter **20**, 365220 (2008), DOI: 10.1088/0953-8984/20/36/365220

5. *Effect of pressure on the superconducting critical temperature of $La[O_{0.89}F_{0.11}]FeAs$ and $Ce[O_{0.88}F_{0.12}]FeAs$*
D. A. Zocco, J. J. Hamlin, R. E. Baumbach, M. B. Maple, M. A. McGuire, A. S. Sefat, B. C. Sales, R. Jin, D. Mandrus, J. R. Jeffries, S. T. Weir, and Y. K. Vohra
Physica C **468**, 2229 (2008), DOI: 10.1016/j.physc.2008.06.010
Physica C Top Cited Article 2005-2010

4. *Bose-Einstein Condensation of $S = 1$ Ni spin degrees of freedom in $NiCl_2$-4SC$(NH_2)_2$*
V. S. Zapf, D. Zocco, B. R. Hansen, M. Jaime, N. Harrison, C. D. Batista, M. Kenzelmann, C. Niedermayer, A. Lacerda, and A. Paduan-Filho
Phys. Rev. Lett. **96**, 077204 (2006), DOI: 10.1103/PhysRevLett.96.077204
Featured in the Journal Club for Condensed Matter Physics, 2005

3. *Approaching field tuned quantum criticality in $CeIn_{3-x}Sn_x$*
A. V. Silhanek, D. Zocco, M. Jaime, N. Harrison, T. Ebihara
Physica B **378–380**, pp. 90-91 (2006), DOI: 10.1016/j.physb.2006.01.036

2. *Uniaxial pressure dependence of the dynamical properties of vortex lines in Bi-2212 single crystals*
D. Zocco, M. Monteverde, M. Núñez-Regueiro and C. Acha
Physica B **354**, pp. 261-265 (2004), DOI: 10.1016/j.physb.2004.09.060

1. *Uniaxial pressure dependence of the dynamical properties of vortex lines in BSCCO single crystals*
D. Zocco, M. Monteverde, M. Núñez-Regueiro and C. Acha
Proceeding of the conference "Pushing Physics at Low Temperatures"
J. Low Temp. Phys. **135**, 165 (2004), DOI: 10.1023/B:JOLT.0000017045.07260.89

Selected invited talks at conferences and seminars

- *Correlation and topology in heavy fermion flat band systems*
  APS March Meeting 2025 symposium "Emergent Flat Bands in Bulk Quantum Materials", Anaheim, USA
  March 18, 2025
- *Correlation-driven topological semimetals*
  International Conference on Superconductivity and Magnetism, Fethiye, Turkey
  April 29, 2024
- *Control of electronic topology in a strongly correlated electron system*
  KITP Conference "Topology, Symmetry and Interactions in Crystals: Emerging Concepts and Unifying Themes", Santa Barbara, USA
  April 4, 2023
- *Controlling electronic topology in Weyl-Kondo semimetals*
  APS March Meeting 2023 symposium "New frontiers at the Intersection of strong correlations and topology", Las Vegas, USA
  March 6, 2023
- *Materials at the intersection of strong electronic correlations and nontrivial topology*
  Institute for Quantum Materials and Technologies, Karlsruhe Institute of Technology, Germany
  January 31, 2023
- *Controlling electronic topology in a strongly correlated electron system*
  Focus Workshop "Topological Materials: From Weak to Strong Correlations", Dresden, Germany
  April 13, 2022
- *Lattice dynamical properties of $SrPt_3P$ studied via inelastic x-ray scattering and density functional perturbation theory*
  International Conference Superstripes, Ischia, Italy
  June 25, 2016
- *Multiband superconductivity and electronic correlations in (K,Rb,Cs)Fe_2As_2 iron-based superconductors*
  International Conference on Superconductivity and Magnetism, Fethiye, Turkey
  April 26, 2016
- *Multiband superconductivity and electronic correlations in iron-based superconductors*
  DFG/GRK 1621 group seminar, Technische Universität Dresden, Germany
  January 12, 2016
- *Electronic correlations in AFe_2As_2 iron-based superconductors (A = K, Rb, Cs)*
  International Conference Superstripes, Ischia, Italy
  June 15, 2015
- *Interplay of superconductivity, charge order and magnetism in correlated electron materials*
  Néel Institute seminar, Grenoble, France
  September 23, 2014
- *Paramagnetic Limiting of the Upper Critical Field of Iron-Pnictide Superconductors*
  International Conference on Superconductivity and Magnetism, Antalya, Turkey
  April 29, 2014
- *Exploration of the H–T phase diagram of KFe_2As_2 via thermal expansion and magnetostriction*
  High Magnetic Field Laboratory seminar, Dresden, Germany
  December 6, 2012