

Academic Curriculum Vitae

- *27.11.1976** Born in Berlin, Germany
- 1983-1989** Kiepert elementary school in Berlin-Marienfelde
- 1989-1996** Eckener secondary school in Berlin-Mariendorf
- 1996/1997** Study of Modern German Literature, Freie Universität Berlin
- 1997-1998** Military service in Rothenburg (Wümme)
- 1998** Study of Horticultural Science, Humboldt University Berlin
- 1999-2004** Study of Physics, Freie Universität Berlin
- 2002** Desy Summer Student at the HeraB detector in Hamburg, Germany. Analysis of Pions and Gammas in the Electromagnetic Calorimeter (HeraB note 02-077)
- 2003-2004** Physics diploma in the group of Prof. Dr. M. Wolf at the Fachbereich Physik der Freien Universität Berlin with the topic „*Ultrakurzzeitdynamik von Elektronentransferprozessen im Adsorbatsystem $C_6F_6/Cu(111)$ / Ultrafast Dynamics of Electron Transfer Processes in the Adsorbate System $C_6F_6/Cu(111)$* “.
- 2005-2009** Student member of the International Max-Planck Research School Complex Surfaces in Materials Science (IMPRS-CS) in Berlin.
- 2004-2009** PhD studies regarding the „*Ultrafast Electron Dynamics in Low-Dimensional Materials*“ in the group of Prof. Dr. M. Wolf at the Fachbereich Physik, Freie Universität Berlin. The thesis was defended on the 9th of February 2009 and graded with “summa cum laudae” (excellent).
- 2009** Feodor-Lynen fellow of the Alexander-von-Humboldt Foundation
- 2009-current** Postdoctoral studies in Z.-X. Shen’s group at the Stanford University concerning the dynamics of strongly correlated electron systems by time- and angle-resolved photoemission spectroscopy.

List of Peer-Reviewed Publications

P. S. Kirchmann, P.A. Loukakos, U. Bovensiepen, M. Wolf, *Ultrafast Electron Dynamics Studied with Time-Resolved Two-Photon Photoemission: Intra- and Interband Scattering in $C_6F_6/Cu(111)$* , New Journal of Physics **7** (2005) 113. [DOI: 10.1088/1367-2630/7/1/113](https://doi.org/10.1088/1367-2630/7/1/113)

S. Vijayalakshmi, A. Föhlisch P. S. Kirchmann, F. Hennies, A. Pietzsch, M. Nagasono, W. Wurth, *Bond polarization and image-potential screening in adsorbed C_6F_6 on $Cu(111)$* , Surface Science **600** (2006) 4972. [DOI: 10.1016/j.susc.2006.08.017](https://doi.org/10.1016/j.susc.2006.08.017)

P. S. Kirchmann, P. Loukakos, U. Bovensiepen, M. Wolf, S. Vijayalakshmi, F. Hennies, A. Pietzsch, M. Nagasono, A. Föhlisch, and W. Wurth, *Ultrafast Electron Dynamics in $C_6F_6/Cu(111)$ after Localized or Delocalized Excitation*. In: Ultrafast Phenomena XV, Proceedings of the 15th International Conference 2006; Eds.: P. Corkum, D. Jonas, R.J.D. Miller, A.M. Weiner; Publ.: Springer Berlin-Heidelberg; ISBN: 978-3-540-68779-5, Springer Series in Chemical Physics, Vol **88** (2007) 276

P. S. Kirchmann, M. Wolf, J. H. Dil, K. Horn, and U. Bovensiepen, *Quantum Size Effects in $Pb/Si(111)$ Investigated by Laser-Induced Photoemission*, Physical Review. B **76** (2007) 075406. [DOI: 10.1103/PhysRevB.76.075406](https://doi.org/10.1103/PhysRevB.76.075406)

P. S. Kirchmann, L. Rettig, D. Nandi, U. Lipowski, M. Wolf, and U. Bovensiepen, *A Time-of-Flight Spectrometer for Angle-Resolved Detection of Low Energy Electrons in Two Dimensions*, Applied Physics A-Materials Science & Processing **91** (2008) 211. [DOI: 10.1007/s00339-008-4422-5](https://doi.org/10.1007/s00339-008-4422-5)

P. S. Kirchmann & U. Bovensiepen. *Ultrafast Electron Dynamics in $Pb/Si(111)$ Investigated by Two-Photon Photoemission*. Physical Review B **78**, (2008) 035437. [DOI: 10.1103/PhysRevB.78.035437](https://doi.org/10.1103/PhysRevB.78.035437)

P. S. Kirchmann & U. Bovensiepen. *Ultrafast Electron Dynamics in Quantum Well States of $Pb/Si(111)$ Investigated by Two-Photon Photoemission*. In: Ultrafast Phenomena XVI, Proceedings of the 16th International Conference 2008. Eds.: P. Corkum, S. De Silvestri, K. Nelson, E. Riedle, & R. Schoenlein, Springer Series in Chemical Physics. Springer-Verlag Berlin (in press).

F. Schmitt, P. S. Kirchmann, U. Bovensiepen, R. G. Moore, L. Rettig, M. Krenz, J.-H. Chu, N. Ru, L. Perfetti, D. H. Lu, M. Wolf, I. R. Fisher, & Z.-X. Shen. *Effect of the Amplitude Mode and the Transient Melting of A Charge Density Wave on the Electronic Structure of $TbTe_3$* . Science **321** (2008) 1649. [DOI: 10.1126/science.1160778](https://doi.org/10.1126/science.1160778)

Participation at Conventions:

2004

DPG Frühjahrstagung (Deutsche Physikalische Gesellschaft), Regensburg, Germany
Electron Dynamics of $C_6F_6/Cu(111)$ Studied by Time Resolved Photoelectron and Resonant Auger Raman Spectroscopy

2005

DPG Frühjahrstagung (Deutsche Physikalische Gesellschaft), Berlin, Germany
Ultrafast Electron Dynamics in $C_6F_6/Cu(111)$ Analyzed with Time-Resolved Photoelectron and Resonant Auger-Raman Spectroscopy

23rd European Conference on Surface Science (ECOSS 23), Berlin, Germany
Ultrafast Charge Transfer Dynamics in $C_6F_6/Cu(111)$ Studied with Time-Resolved Two-Photon Photoemission and High-Resolution Autoionization Spectroscopy

355. Wilhelm und Else Heraeus-Seminar, Ultrafast Dynamics of Collective Excitations in Solids, Vitte, Hiddensee, Germany
Ultrafast Charge Transfer Dynamics in $C_6F_6/Cu(111)$ Studied with Time-Resolved Two-Photon Photoemission and High-Resolution Autoionization Spectroscopy

2006

5th International Symposium on Ultrafast Surface Dynamics and 46th IUVSTA Workshop (International Union for Vacuum Science, Technique, and Applications), Abashiri, Japan
Quantum Well States of Ultrathin Epitaxial Pb Films on Si(111) Investigated with Time-Resolved 2PPE

15th International Conference on Ultrafast Phenomena, (Optical Society of America), Pacific Grove, California, USA
Ultrafast Electron Dynamics in $C_6F_6/Cu(111)$ after a Localized or Delocalized Excitation

10th ANCC Seminar, (National Institute of Material Science), Tsukuba, Japan
Ultrafast Electron Dynamics in Quantum Well States of Pb/Si(111) Observed by Time-Resolved Photoemission

2007

1st IMPRS-CS Workshop (International Max-Planck-Research-School Complex Surfaces in Materials Science), Ringberg, Germany

Electron Scattering Processes in 1D and 2D Investigated by Time-Resolved Two-Photon-Photoemission

WUPCOM'07 (Winter School on Ultrafast Processes in Condensed Matter), Reit im Winkl, Germany

A novel k-Resolving Time-of-Flight Electron Spectrometer for the Use in Surface Science

2008

DPG Frühjahrstagung (Deutsche Physikalische Gesellschaft), Berlin, Germany

*Ultrafast Electron Dynamics in Pb/Si(111) Investigated by Two-Photon Photoemission, and
An Angle-Resolved Time-of-Flight Spectrometer for Low-Energy Photoelectron Spectroscopy*

16th International Conference on Ultrafast Phenomena, (Optical Society of America), Stresa, Lago Maggiore, Italy

Ultrafast Electron Dynamics in Quantum Well States of Pb/Si(111) Investigated by Two-Photon Photoemission

6th International Symposium on Ultrafast Surface Dynamics, Kloster Banz, Germany

Collective Excitations of CDW Compound TbTe₃ Analyzed by Time- and Angle-Resolved Photoemission Spectroscopy

2009

WUPCOM'09 (Winter School on Ultrafast Processes in Condensed Matter), Reit im Winkl, Germany

Transient electronic structure and ultrafast melting of a charge density wave in TbTe₃

Gordon Research Conference on Dynamics at Surfaces, Proctor Academy in Andover, NH, USA.

Quasi-Particle Lifetimes in Quantum Well Nanostructures