

# Marc Vrakking

## Publications:

### Papers in General Science Journals

- [1] A.E. Boguslavskiy, J. Mikosch, A. Gijsbertsen, M. Spanner, S. Patchkovskii, N. Gador, M.J.J. Vrakking, A. Stolow, The Multielectron Ionization Dynamics Underlying Attosecond Strong-Field Spectroscopies, *Science*, 335 (2012) 1336-1340.
- [2] S. Zherebtsov, T. Fennel, J. Plenge, E. Antonsson, I. Znakovskaya, A. Wirth, O. Herrwerth, F. Sussmann, C. Peltz, I. Ahmad, S.A. Trushin, V. Pervak, S. Karsch, M.J.J. Vrakking, B. Langer, C. Graf, M.I. Stockman, F. Krausz, E. Ruhl, M.F. Kling, Controlled near-field enhanced electron acceleration from dielectric nanospheres with intense few-cycle laser fields, *Nature Physics*, 7 (2011) 656-662.
- [3] Y. Huismans, A. Rouzee, A. Gijsbertsen, J.H. Jungmann, A.S. Smolkowska, P.S.W.M. Logman, F. Lepine, C. Cauchy, S. Zamith, T. Marchenko, J.M. Bakker, G. Berden, B. Redlich, A.F.G. van der Meer, H.G. Muller, W. Vermin, K.J. Schafer, M. Spanner, M.Y. Ivanov, O. Smirnova, D. Bauer, S.V. Popruzhenko, M.J.J. Vrakking, Time-Resolved Holography with Photoelectrons, *Science*, 331 (2011) 61-64.
- [4] G. Sansone, F. Kelkensberg, J.F. Perez-Torres, F. Morales, M.F. Kling, W. Siu, O. Ghafur, P. Johnsson, M. Swoboda, E. Benedetti, F. Ferrari, F. Lepine, J.L. Sanz-Vicario, S. Zherebtsov, I. Znakovskaya, A. L'Huillier, M.Y. Ivanov, M. Nisoli, F. Martin, M.J.J. Vrakking, Electron localization following attosecond molecular photoionization, *Nature*, 465 (2010) 763-U763.
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- [7] T. Remetter, P. Johnsson, J. Mauritsson, K. Varju, Y. Ni, F. Lepine, E. Gustafsson, M. Kling, J. Khan, R. Lopez-Martens, K.J. Schafer, M.J.J. Vrakking, A. L'Huillier, Attosecond electron wave packet interferometry, *Nature Physics*, 2 (2006) 323-326.
- [8] M.F. Kling, C. Siedschlag, A.J. Verhoef, J.I. Khan, M. Schultze, T. Uphues, Y. Ni, M. Uiberacker, M. Drescher, F. Krausz, M.J.J. Vrakking, Control of electron localization in molecular dissociation, *Science*, 312 (2006) 246-248.

### Book Chapters and Reviews

- [9] A. Rouzée, Y. Huismans, F. Kelkensberg, A.S. Smolkowska, J. Jungmann, A. Gijsbertsen, W. Siu, G. Gademann, A. Hundertmark, P. Johnsson, M.J.J. Vrakking, Molecular movies from Molecular Frame Photoelectron Angular Distribution (MF-PAD) measurements, 2013 (in press).
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- [14] I. Znakovskaya, P. von den Hoff, G. Marcus, S. Zherebtsov, B. Bergues, X. Gu, Y. Deng, M.J.J. Vrakking, R. Kienberger, F. Krausz, R. de Vivie-Riedle, M.F. Kling, Subcycle Controlled Charge-Directed Reactivity with Few-Cycle Midinfrared Pulses, *Physical Review Letters*, 108 (2012) 063002.
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- [17] F. Kelkensberg, W. Siu, J.F. Perez-Torres, F. Morales, G. Gademann, A. Rouzee, P. Johnsson, M. Lucchini, F. Calegari, J.L. Sanz-Vicario, F. Martin, M.J.J. Vrakking, Attosecond Control in Photoionization of Hydrogen Molecules, *Physical Review Letters*, 107 (2011) 043002.
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### **Papers in Instrumentation Journals**

- [108] J.H. Jungmann, A. Gijsbertsen, J. Visser, J. Visschers, R.M.A. Heeren, M.J.J. Vrakking, A new imaging method for understanding chemical dynamics: Efficient slice imaging using an in-vacuum pixel detector, *Review of Scientific Instruments*, 81 (2010) 103112.
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### **Papers in Computer Science Journals**

- [116] O.M. Shir, J.N. Kok, T. Back, M.J.J. Vrakking, Learning the complete-basis-functions parameterization for the optimization of dynamic molecular alignment by ES, *Intelligent Data Engineering and Automated Learning - Ideal 2006*, Proceedings, 4224 (2006) 410-418.
- [117] O.M. Shir, C. Siedschlag, T. Back, M.J.J. Vrakking, Niching in evolution strategies and its application to laser pulse shaping, *Artificial Evolution*, 3871 (2006) 85-96.

### **Other notable invited contributions**

- [118] M.J.J. Vrakking, T. Elsaesser, X-RAY PHOTONICS X-rays inspire electron movies, *Nature Photonics*, 6 (2012) 645-647.
- [119] M.J.J. Vrakking, Illuminating molecules from within, *Physics*, 2 (2009) 72.
- [120] M. Vrakking, Chemical Physics Electronic Movies, *Nature*, 460 (2009) 960-961.

### **Popular Science Contributions**

- [121] Y. Huismans, M.J.J. Vrakking, Atoom maakt hologram van zichzelf, *NTvN*, (2011).
- [122] F. Kelkensberg, M.J.J. Vrakking, Attoseconde electrondynamics in moleculen, *NTvN*, (2011).
- [123] M.F. Kling, M.J.J. Vrakking, Elektronen unter Kontrolle, *Physik Journal*, (2012) S.25.

### **Granted patents**

"XUV mirror for attosecond laser pulses", Dutch pat.nr. 2002287

## Invited Talks (2002- )

- 1) November 14<sup>th</sup> 2012: Seminar MPK, Dresden: *Attosecond time-resolved molecular electron dynamics*
- 2) November 13<sup>th</sup> 2012: Manfred Eigen Nachwuchswissenschaftlergespräche, Jena: *Attosecond time-resolved molecular electron dynamics*
- 3) October 4<sup>th</sup> 2012: Conference of the European Theoretical Spectroscopy Facility, Coimbra: *Novel Methods for Studying Time-resolved Structural and Electronic Dynamics in Molecules*
- 4) September 19<sup>th</sup> 2012: ICESS-12 Conference, Saint-Malo: *Novel Methods for Studying Time-resolved Structural and Electronic Dynamics in Molecules*
- 5) September 10<sup>th</sup> 2012: MOLEC Conference, Oxford: *Novel Methods for Studying Time-resolved Structural and Electronic Dynamics in Molecules*
- 6) August 31<sup>st</sup> 2012: MPS Conference Berlin: *Novel Methods for Studying Time-resolved Structural and Electronic Dynamics in Molecules*
- 7) August 8<sup>th</sup> 2012: Helmholtz Virtual Institute Dynamical Pathways: *Novel Methods for Studying Time-resolved Structural and Electronic Dynamics in Molecules*
- 8) July 16<sup>th</sup> 2012: XFEL Workshop, Hamburg: *High-harmonic and FEL-based pump-probe spectroscopy*
- 9) July 3<sup>rd</sup> 2012: Dynamical Imaging workshop Banff: *Time-resolved molecular dynamics using diffraction of high-energy electrons*
- 10) May 21<sup>st</sup> 2012: Festkolloquium André Bandrauk and Jörn Manz: *Attosecond time-resolved molecular electron dynamics*
- 11) April 26<sup>th</sup> 2012: Symposium Korean Physical Society: *Attosecond time-resolved molecular electron dynamics*
- 12) April 12<sup>th</sup> 2012: Hereaus Workshop, Bad Honnef: *Novel methods for studying time-resolved structural and electronic dynamics in molecules*
- 13) March 23<sup>rd</sup> 2012: COST Workshop Cluj: *Novel methods for studying time-resolved structural and electronic dynamics in molecules*
- 14) February 28<sup>th</sup> 2012: Attosecond workshop Jerusalem: *Ultrafast Molecular Dynamics using Attosecond Lasers and X-ray Free Electron Lasers*
- 15) January 14<sup>th</sup> 2012: Time-Dependent Density Functional Theory; Prospects and Applications, Benasque: *Attosecond time-resolved molecular electron dynamics*
- 16) September 13<sup>th</sup> 2011: Correlation Effects in Radiation, CERF11, Rostock: *Correlated Electron Dynamics using Attosecond Lasers*
- 17) July 17<sup>th</sup> 2011: Femtochemistry Madrid: *Time-resolved photoelectron holography*
- 18) June 3<sup>rd</sup> 2011: Bunsentagung, Berlin: *Ultrafast Molecular Dynamics using Attosecond Lasers and X-ray Free Electron Lasers*
- 19) May 30<sup>th</sup> 2011: Molecular Logic Workshop, Leiden: *Control of electronic processes on the (sub)-femtosecond timescale*
- 20) March 14<sup>th</sup> 2011: DPG Tagung Dresden: *Attosecond Time-Resolved Molecular Electron Dynamics*
- 21) January 18<sup>th</sup> 2011: FOM Veldhoven: *Connecting Harmonics-Based and FEL-Based XUV/X-ray research*
- 22) December 16<sup>th</sup> 2010 – XFEL Meeting, Trieste - *Time-resolved molecular dynamics using the FLASH FEL*
- 23) October 20<sup>th</sup> 2010 – COST Meeting Hersonissos - *Studying Ultrafast Dynamics using Harmonics-based and FEL-based XUV/x-ray light sources*
- 24) October 14<sup>th</sup> 2010 – IMPRS-QD Symposium MPIK Heidelberg - *Novel Probes of Ultrafast Molecular Dynamics*
- 25) August 21<sup>st</sup> 2010 – Heraus Workshop on Ultrafast Atomic Physics, Bad Honnef - *Time-resolved photoelectron holography*
- 26) August 6<sup>th</sup> 2010 – KITP, Santa Barbara, CA - *Connecting Harmonics-based and FEL-based XUV/x-ray experiments*
- 27) July 13<sup>th</sup> 2010 – ELI Workshop, Budapest - *Ultrafast Dynamics Using Intense XUV/x-ray Pulses*
- 28) June 7<sup>th</sup> 2010 – Multi-photon Gordon Conference, Tilton, NH – *Attosecond Molecular Electron Dynamics*
- 29) April 15<sup>th</sup> 2010 - SPIE Photonics Europe, Brussels – *Attosecond Time-Resolved Electron Dynamics in Molecules*
- 30) March 15<sup>th</sup> 2010 – Ringberg Meeting on Science with FELs - *Attosecond and Femtosecond Chemistry at XUV & X-ray FELs*
- 31) February 4<sup>th</sup> 2010 - Photoionization Gordon Conference Galveston - *Attosecond Time-Resolved Electron Dynamics*
- 32) January 28<sup>th</sup> 2010 - FLASH II Preparatory Phase Kick-off Meeting , Hamburg – *Perspectives for Atomic and Molecular Physics using FLASH II*
- 33) December 3<sup>rd</sup> 2009: Workshop The Future of Ultrafast Soft X-ray Science, Berkeley: *Attosecond and Femtosecond Chemistry at 4<sup>th</sup> Generation Light Sources*
- 34) September 29<sup>th</sup> 2009: Workshop Ultrafast X-ray methods for studying transient electronic structure and nuclear dynamics, Bad Honnef: *Connecting lab-based attosecond science and FEL research*
- 35) July 31<sup>st</sup> 2009: Attosecond Conference Manhattan, Kansas: *Attosecond time-resolved electron dynamics in molecules*

- 36) July 13<sup>th</sup>. 2009: Laser Physics Conference Barcelona: *Attosecond time-resolved electron dynamics in molecules*
- 37) July 1<sup>st</sup>. 2009: LCLS Workshop Daresbury: *Pump-probe spectroscopy using XUV/X-ray free electron lasers*
- 38) May 26<sup>th</sup>. 2009: Workshop Studies of Atoms and Molecules with New Light Sources, Sandbjerg Estate, Denmark - *Novel Approaches towards studying time-resolved molecular dynamics*
- 39) May 9<sup>th</sup>. 2009: PEARL conference Dublin - *Novel Approaches towards studying time-resolved molecular dynamics*
- 40) April 28<sup>th</sup>. 2009: Workshop Collisions, Electron Wavepackets and Cluster (in honor of Prof. Steven Stolte) - *Novel Approaches towards studying time-resolved molecular dynamics*
- 41) March 23<sup>rd</sup>. 2009: ACS Meeting Salt Lake City – *Pump-probe Spectroscopy using Attosecond light sources*
- 42) January 21<sup>st</sup>. 2009: FOM Physics @ Veldhoven – *Imaging attosecond time-resolved electron dynamics*
- 43) November 28<sup>th</sup>. 2008: ISUILS Conference Kyoto – *Pump-probe spectroscopy with attosecond light sources*
- 44) November 23<sup>rd</sup>. 2008: ESF Conference Chemical Control with Electrons and Photons, Obergurgl – *Pump-probe spectroscopy with attosecond light sources.*
- 45) October 29<sup>th</sup>. 2008: SQS Workshop Aarhus – *Velocity Map Imaging at FLASH and XFEL*
- 46) October 8<sup>th</sup>. 2008 : XFEL Workshop, Hamburg – *Laser-controlled molecular alignment and orientation at FLASH and XFEL*
- 47) September 20<sup>th</sup>. 2008: ICOMP Conference, Heidelberg – *Attosecond molecular electron dynamics*
- 48) September 9<sup>th</sup>. 2008: FLASH Workshop, Hamburg – *Strong field ionization at far-infrared wavelengths*
- 49) August 30<sup>th</sup>. 2008: Workshop Intense Attosecond Lasers, Herakleion – *Pump-probe spectroscopy using intense attosecond sources*
- 50) May 16<sup>th</sup>. 2008: Attosecond Workshop, ITAMP, Harvard – *Experimental Observations of Attosecond Time-resolved Electron Dynamics*
- 51) May 13<sup>th</sup>. 2008: Attosecond Workshop, Imperial College London – *Connecting Attosecond Science and XUV FEL Research*
- 52) February 4<sup>th</sup>. 2008: Novel Labsources and Applications, Obergurgl – *Attosecond time-resolved electron dynamics in the hydrogen molecular ion.*
- 53) November 28<sup>th</sup>. 2007: Laserlab Europe Users meeting, Madrid – *Attosecond time-resolved electron dynamics*
- 54) September 10<sup>th</sup>. 2007: QuAMP conference, London, UK – *The other half of the story: Attosecond time-resolved electron dynamics*
- 55) August 15<sup>th</sup>. 2007: Quantum control Gordon conference, Salve Regina, USA – *Controlling electron dynamics attosecond timescales*
- 56) August 3<sup>rd</sup>. 2007: Attosecond Workshop Dresden, Germany – *Photoexcitation on attosecond timescales*
- 57) July 6<sup>th</sup>. 2007: Workshop "New science with next generation light sources", Daresbury, UK – *Connecting lab-based attosecond science with FEL research*
- 58) June 12<sup>th</sup>. 2007: Workshop "Emerging Sources", Lund, Sweden – *Ultrafast XUV sources and applications*
- 59) May 7<sup>th</sup>. 2007: ECAMP IX, Herakleion, Crete – *The other half of the story: Attosecond time-resolved electron dynamics*
- 60) March 4<sup>th</sup>. 2007: APS March Meeting Denver 2007, Tutorial on attosecond science –*Development of attosecond lasers and their application to atomic and molecular dynamics*
- 61) Januari 23<sup>rd</sup>. 2007: FOM-Meeting Physics@Veldhoven 2007, Focus Sessie "Physics with Ultrashort Laser Pulses" – *The other half of the story: Attosecond time-resolved electron dynamics*
- 62) November 22<sup>nd</sup>. 2006: Ringberg Annual Meeting on Attosecond and High-Field Physics, Ringberg Castle, Germany – *Photoionization Revisited: a new understanding of above-threshold ionization*
- 63) November 14<sup>th</sup>. 2006: ELI Workshop, Garching, Germany – *Attosecond Time-resolved Electron Dynamics in Molecules*
- 64) August 2<sup>nd</sup>. 2006: KITP Attosecond Conference, Santa Barbara, USA – *Attosecond Time-resolved Electron Dynamics*
- 65) July 24<sup>th</sup>. 2006: Symposium Dynamics of Collective Electron Oscillations, Berlin, Germany – *Attosecond Time-resolved Electron Dynamics*
- 66) June 15<sup>th</sup>. 2006: Multi-photon Gordon Research Conference, Tilton School, New Hampshire, USA – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*
- 67) May 18<sup>th</sup>. 2006: DAMOP, Knoxville, Tennessee, USA – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*
- 68) April 9<sup>th</sup>. 2006: Dynamical Imaging Workshop London – *Applications of Attosecond Lasers to Molecules in Strong Laser Fields*
- 69) March 17<sup>th</sup>. 2006: DPG Frühjahrstagung, Symposium "Intense field interactions with molecules and clusters", Frankfurt, Germany – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*
- 70) March 16<sup>th</sup>. 2006: Laserlab Foresight Workshop on New Laser Technologies, Bordeaux, France – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*



- 71) December 19<sup>th</sup> 2005: Pacificchem Symposium "Chemistry with Ultrashort Intense Laser Pulses: The Next Frontier", Hawaii – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*
- 72) December 9<sup>th</sup> 2005: ELI Scientific Case meeting, Paris, France – *Attosecond Time-resolved Electron Dynamics in Molecules*
- 73) October 12<sup>th</sup> 2005: ICOMP X Conference, Orford, Canada - *Strongly driven electrons in the generation and application of attosecond light pulses*
- 74) September 12<sup>th</sup> 2005: Nineteenth Colloquium on High Resolution Molecular Spectroscopy will be held in Salamanca, Spain - *Strongly driven electrons in the generation and application of attosecond light pulses*
- 75) August 15<sup>th</sup> 2005: International Workshop on Intense Laser-Matter Interaction and Pulse Propagation, Dresden – *Strongly driven electrons in the generation and application of attosecond light pulses*
- 76) August 3<sup>rd</sup> 2005: 37th EGAS Conference, Dublin, Ireland – *Time-, energy- and angle-resolved photoelectrons spectroscopy and the application of attosecond light pulses*
- 77) July 20<sup>th</sup> 2005: ICPEAC Conference, Rosario, Argentina – *Time-, energy- and angle-resolved photoelectrons spectroscopy and the application of attosecond light pulses*
- 78) May 17<sup>th</sup> 2005: XXI International Symposium on Molecular Beams, Hersonissos, Crete – *Strongly driven electrons – the development and application of attosecond light pulses*
- 79) March 22<sup>nd</sup> 2005: Workshop New trends in gas phase VUV/soft X-ray high resolution spectroscopies at SOLEIL, Orsay, France – *Photoionization Microscopy at XUV Wavelengths*
- 80) Februari 23<sup>rd</sup> 2005: Kickoff Meeting of the Asian Harmonics Group, EU Marie Curie Research Training Network 'XTRA' (presented as video conference).
- 81) December 1<sup>st</sup> 2004: Atomic Physics Workshop Dresden – *Direct and indirect ways to study electron dynamics on attosecond timescales*
- 82) September 20<sup>th</sup> 2004: International Symposium on Ultrafast Intense laser Science 3, Sicily, *Strongly driven electron dynamics in molecules and clusters.*
- 83) September 6<sup>th</sup> 2004: International Conference on the Dynamics of Molecular Systems (MOLEC XV), Nunspeet, The Netherlands: *Strongly driven electrons: direct and indirect ways to study electron dynamics on attosecond timescales.*
- 84) July 2<sup>nd</sup> 2004: International Conference on Electron and Photon Impact Ionization and Related Topics, Louvain-la-Neuve, Belgium, *Strongly-driven electrons: photoionization between the attosecond and DC domain.*
- 85) March 31<sup>th</sup> 2004: ACS Symposium Anaheim, USA, Emerging Ultrafast Spectroscopies: From Chemistry to Biophysics, *Strongly-driven electrons: from slow photoelectron imaging to cluster explosions and attosecond laser pulses*
- 86) October 9<sup>th</sup> 2003: COCOMO RTN Network meeting, Greece - *Strongly-driven electrons: from slow photoelectron imaging to cluster explosions and attosecond laser pulses*
- 87) September 24<sup>th</sup> 2003: Gordon Conference on Photoions, Photoionization and Photodetachment, Oxford, United Kingdom - *Strongly-driven electrons: from slow photoelectron imaging to attosecond laser pulses and cluster explosions*
- 88) July 18<sup>th</sup> 2003: 35th EGAS Conference, Brussels, Belgium - *Strongly-driven electrons: from slow photoelectron imaging to attosecond laser pulses*
- 89) March 24<sup>th</sup> 2003: ACS VUV Symposium New Orleans, USA - *Coherent Control of Atomic and Molecular Processes*
- 90) Februari 17<sup>th</sup> 2003: Workshop "FEL's up to the UV and soft x-rays", Daresbury, United Kingdom - *Time-resolved atomic and molecular dynamics using XUV free electron lasers*
- 91) December 3<sup>rd</sup> 2002: Stereodynamics Conference Schoorl - *Control of Molecular Properties using Intense Femtosecond Lasers*
- 92) November 15<sup>th</sup> 2002: NNV Fall Meeting Lunteren - *Control of Molecular Properties using Intense Femtosecond Lasers*
- 93) October 19<sup>th</sup> 2002: ICOMP-IX, Greece - *Control of Molecular Alignment using Intense Femtosecond Lasers*
- 94) July 1<sup>st</sup> 2002: Gordon Conference on Multiphoton Processes - *Control of Molecular Alignment using Intense Femtosecond Lasers*
- 95) June 23<sup>rd</sup> 2002: IQEC-LAT Moscow, Russia - *Control of Molecular Alignment using Intense Femtosecond Lasers*

## Colloquia (2002- )

- 96) December 18<sup>th</sup> 2012: Colloquium ETH Zürich: *Attosecond time-resolved molecular electron dynamics*
- 97) October 11<sup>th</sup> 2012: Colloquium UC Berkeley: *Novel Methods for Studying Time-resolved Structural and Electronic Dynamics in Molecules*
- 98) February 17<sup>th</sup> 2012: Colloquium CFEL, Hamburg: *Ultrafast Molecular Dynamics using Attosecond Lasers and X-ray Free Electron Lasers*
- 99) February 24<sup>th</sup> 2011: Colloquium Oxford: *Ultrafast Dynamics using Harmonic-based and FEL-based XUV/x-ray experiments*
- 100) February 15<sup>th</sup> 2011: Colloquium MPQ Garching: *Novel Methods for Studying Time-Resolved Molecular Dynamics*
- 101) January 27<sup>th</sup> 2011: CERN Colloquium: *Connecting Lab-Based Attosecond Science with FEL research*
- 102) January 25<sup>th</sup> 2011: Colloquium Stanford: *Connecting Lab-Based Attosecond Science with FEL research*
- 103) November 19<sup>th</sup> 2010 – Colloquium FU Berlin - *Connecting Lab-Based Attosecond Science with FEL research*
- 104) November 11<sup>th</sup> 2010 – Physikalisches Kolloquium Kassel - *Connecting Lab-Based Attosecond Science with FEL research*
- 105) June 11<sup>th</sup> 2010 – Colloquium ITAMP Harvard - *Attosecond and Femtosecond Chemistry at XUV & X-ray FELs*
- 106) June 3<sup>rd</sup> 2010 – Colloquium Rostock - *Attosecond and Femtosecond Chemistry at XUV & X-ray FELs*
- 107) January 29<sup>th</sup> 2010 – Colloquium Leiden – *Attosecond Time-Resolved Electron Dynamics*
- 108) February 19<sup>th</sup> 2009: Colloquium Groningen – *Pump-probe Spectroscopy using Attosecond light sources*
- 109) February 16<sup>th</sup> 2009: Colloquium AMOLF – *Pump-probe Spectroscopy using Attosecond light sources*
- 110) November 14<sup>th</sup> 2008: Colloquium Freie Universität Berlin – *Pump-probe spectroscopy with attosecond light sources*
- 111) June 17<sup>th</sup> 2008: Colloquium University of Hannover – *Experimental Observations of Attosecond Time-resolved Electron Dynamics*
- 112) November 16<sup>th</sup> 2007: Colloquium Imperial College London – *Attosecond time-resolved electron dynamics*
- 113) November 13<sup>th</sup> 2007: Colloquium University of Aarhus – *Attosecond time-resolved electron dynamics*
- 114) November 8<sup>th</sup> 2007: Colloquium Max Born Institute Berlin – *Attosecond time-resolved electron dynamics*
- 115) September 20<sup>th</sup> 2007: Colloquium University of Eindhoven – *The other half of the story: Attosecond time-resolved electron dynamics*
- 116) June 28<sup>th</sup> 2007: Colloquium University of Goettingen – *The other half of the story: Attosecond time-resolved electron dynamics*
- 117) June 7<sup>th</sup> 2007: Colloquium University of Louvain-la-Neuve – *The other half of the story: Attosecond time-resolved electron dynamics*
- 118) March 27<sup>th</sup> 2007: Colloquium University of Amsterdam – *The other half of the story: Attosecond time-resolved electron dynamics*
- 119) September 26<sup>th</sup> 2006: Politecnico di Milano, Italy – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*
- 120) May 2 2006: Colloquium MPQ Garching – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*
- 121) March 20<sup>th</sup> 2006: Colloquium AMOLF, The Netherlands – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*
- 122) Januari 11<sup>th</sup> 2006: Colloquium Univ. of Frankfurt, Germany – *Applications of Attosecond Lasers to Atoms and Molecules in Strong Laser Fields*
- 123) June 1<sup>st</sup> 2005: Colloquium Max Born Institute, Berlin, Germany – *Strongly driven electrons – the development and application of attosecond light pulses*
- 124) Februari 15<sup>th</sup> 2005: Freie Universität Berlin, *Control of strongly driven electrons: The development and application of attosecond laser pulses*
- 125) Februari 7<sup>th</sup> 2005: University of Freiburg, *Strongly driven electrons as a path towards attosecond dynamics*
- 126) October 22<sup>nd</sup> 2004: Radboud University Nijmegen – *Direct and indirect ways to study ultrafast electron dynamics in atoms and molecules*
- 127) July 9<sup>th</sup> 2004: University of Kaiserslautern, Germany – *Strongly-driven electrons: Photoionization dynamics between the attosecond and DC domain*
- 128) Januari 19<sup>th</sup> 2004: ETH Zurich, Switzerland - *Strongly-driven electrons: from slow photoelectron imaging to cluster explosions and attosecond laser pulses*
- 129) October 13<sup>th</sup> 2003: AMOLF - *Strongly-driven electrons: from slow photoelectron imaging to cluster explosions and attosecond laser pulses*
- 130) May 8<sup>th</sup> 2003: Max-Planck Institut Heidelberg, Germany - *Strongly-driven electrons: from slow photoelectron imaging to attosecond laser pulses*

- 131) Februari 11<sup>th</sup> 2003: Max-Planck Institut fuer Quantenoptik Garching, Germany - *Coherent Control of Atomic and Molecular Processes*
- 132) December 6<sup>th</sup> 2002: University of Lund, Sweden - *Control of Molecular Properties using Intense Femtosecond Lasers*
- 133) April 16<sup>th</sup> 2002: Universiteit Nijmegen - *Control of Molecular Properties using Femtosecond Lasers*
- 134) March 7<sup>th</sup> 2002: Universiteit Groningen - *Control of Molecular Properties using Femtosecond Lasers*
- 135) Februari 27<sup>th</sup> 2002: Fritz-Haber Institute, Berlin, Germany - *Control of Molecular Properties using Femtosecond Lasers*

#### **Contributed Talks (2002- )**

- 136) November 29<sup>th</sup> 2011: DiNL workshop MBI: *Attosecond science at high repetition rates*
- 137) December 2<sup>nd</sup> 2010, MBI-HZB Workshop Berlin - *Connecting Lab-Based Attosecond Science with FEL research*
- 138) May 27<sup>th</sup> 2010 – ATTOFEL Meeting Lund - *Plans within ATTOFEL at AMOLF and MBI*
- 139) May 14<sup>th</sup> 2010 – ICONIC Meeting VU Amsterdam – *Imaging of Ultrafast Dynamics*
- 140) June 13<sup>th</sup> 2007: XTRA network meeting, Lund, Sweden – *How to think about sub-cycle photo-excitation and photo-ionization processes?*
- 141) February 1<sup>st</sup> 2005: XFEL workshop, Zeist – *Controlling molecular degrees of freedom by intense radiation*
- 142) December 7<sup>th</sup> 2004: AMOLF-LIACS Symposium "Evolutionary Approaches in Physics" – *Strong field control of atomic and molecular physics*
- 143) October 15<sup>th</sup> 2004: XTRA RTN Network meeting, Santorini – *Scaled electron dynamics: a brief introduction to part of the AMOLF research program*
- 144) October 4<sup>th</sup> 2004: PICNIC RTN Network meeting, Paris, France – *Attosecond laser pulses and 2D imaging: future technology and future research*
- 145) June 23<sup>rd</sup> 2003: PICNIC RTN Network meeting, Freiburg, Germany - *Progress Report of the Amsterdam Node in the PICNIC Network*
- 146) Januari 28<sup>th</sup> 2003: CW Studiegroep Spectroscopie en Theorie - *Coherent Control of Molecular Processes*

#### **Other presentations (2002-)**

- 147) September 27<sup>th</sup> 2012: Leibniz Marie Curie workshop, Berlin: *Erfahrungsbericht eines erfolgreichen ITN Antragsteller*
- 148) September 23<sup>rd</sup> 2011: Leibniz Führungskolleg Internationalisierung: *Erfahrungsbericht Internationalisierung*
- 149) September 9<sup>th</sup> 2011: Workshop HZB: *New XUV/x-ray research at MBI*
- 150) August 25<sup>th</sup> 2011: Berlin: *AMOLF meets MBI*
- 151) June 17<sup>th</sup> 2011: AMOLF: *14 years at AMOLF – a serendipitous adventure*
- 152) February 4<sup>th</sup> 2011: Bonn – *Erfahrungsbericht Marie Curie Projekte*
- 153) September 27<sup>th</sup> 2010 – Leibniz Marie Curie workshop, Berlin – *Erfahrungsbericht eines erfolgreichen ITN Antragstellers*
- 154) August 19<sup>th</sup> 2008: Summer school FASTQUAST network, Cargese – *Laser-controlled molecular alignment and orientation*
- 155) September 29<sup>th</sup> 2006: DESY Hamburg – *Present and Future Research of the "XTRA" network: A connection to FEL research?*
- 156) December 12-13<sup>th</sup> 2005: Winter School Han-sur-Lesse, Belgium (6 hrs of lectures)
- 157) May 27<sup>th</sup> 2005: Lecture XTRA Summer School, Porquerolles, France – *Using High Harmonics to Study Chemical Processes*