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- Curriculum Vitae -

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- Curriculum Vitae -

21.4.1976

Born in Nuremberg; father: Götz Schwanhäußer (business administrator); mother: Elisabeth Schwanhäußer teacher for chemistry, math, biology, geography and psychology

1982-1986

Elementary school in Nuremberg

1986-1995

High school "Labenwolf-Gymnasiums" in Nuremberg; main subject math and physics

1993-2003

Founding and working within a company with two co-workers (computer business)

1995

High school graduation, mark: 2,0

1995

Begin of studies at the Friedrich-Alexander – University of Erlangen; subject: physics

1997

Internship with the Porex Company, (quality assurance laboratory), Atlanta, Georgia, USA

1998-99

Preparation of the diploma theses at the institute of technical physics, chair for semiconductor physics, at the FA-University, Erlangen, Germany

1999

participation at the summer school, sponsored by the Friedrich Alexander – University Erlangen and the Technical University Munich, Germany, „semiconductors in microelectronics“

2000

Receiving diploma certification in physics, mark 1,11

2000-2004

Working on PhD theses at the Institute for Technical Physics, chair for semiconductor physics, Erlangen, Germany in close cooperation with the Technical University Munich, the University of Santa Barbara California and the JW-Goethe University Frankfurt; supervision of four diploma students;

2004-2005

Postgraduate study at Institute of Peace Research and Security Policy (IFSH) in Hamburg, "Master of Peace and Security Studies";

2005

Internship at the Federal Foreign of Germany, Berlin at the Department of Disarmament and Arms Control (6 weeks, June-July)

2005

Participating at the summer symposium "International Symposiums on Science and World Affairs " sponsored by the Union of Concerned Scientist, Princeton, USA (August)

2005

Performing study on Export Control of Intangible Technologies for the Fraunhofer Institute, Hamburg (September-November)

2006-2008

Scientific employee at the Institute for Peace Research and Security Policies Hamburg (IFSH), at the Interdisciplinary Working Group of Arms Control, Disarmament and Risk Technologies (IFAR²); Research Project titled "Beyond Safeguards - Taking advantage of the early warning capabilities of the improved IAEA safeguard system in respect of nuclear programs leading to outbreak capabilities"

Scientific publications (selection)

- M. Eckardt, A. Schwanhäußer, F. Renner, L. Robledo, A. Friedrich, P. Pohl, P. Kiesel, S. Malzer, G.H. Döhler, D. Driscoll, M. Hanson, A.C. Gossard, Novel concept for efficient THz-emitters based on quasi-ballistic transport in an asymmetric superlattice, *Physica E* **17** , 629 - 630 (2003)
- Schwanhäußer, M. Eckardt, L. Robledo, P. Pohl, A. Friedrich, G. H. Döhler, M. Betz, S. Trumm, A. Leitenstorfer, Nonequilibrium electron transport properties in GaAs investigated by two-color femtosecond pump & probe technique, *Proceedings of ICPS 26* , (2003)
- M. Eckardt, A. Schwanhäußer, L. Robledo, G. H. Döhler, M. Betz, A. Leitenstorfer, Coherent quasi-classical THz oscillations vs. quantum beats in wide potential wells, *Proceedings of ICPS 26* , (2003)
- F. Renner, A. Schwanhäußer, M. Eckardt, P. Pohl, A. Friedrich, L. Robledo, S. Malzer, G. H. Döhler, P. Kiesel, D. Driscoll, M. Hanson, A. C. Gossard, Highly N-doped LT-GaAs and ErAs Recombination Layers used in NipNip THz Photomixers, 4th Symposium on non-stoichiometric III-V compounds **ISBN 3-932392-39-6** , 59 (2002)
- M. Eckardt, A. Schwanhäußer, L. Robledo, G. H. Döhler, M. Betz, A. Leitenstorfer, THz carrier oscillations in GaAs heterostructures detected via two-color femtosecond pump-probe spectroscopy , *Physica B* **314** , 154 - 157 (2002)
- Schwanhäußer, M. Eckardt, L. Robledo, H. Lutz, M. Betz, A. Leitenstorfer, A. Seilmeier, G. H. Döhler, High-field electron transport in Al_xGa_{1-x}As diodes investigated tracing ultrafast absorption changes , *Physica B* **314** , 273 - 277 (2002)
- M. Eckardt, A. Schwanhäußer, L. Robledo, S. Malzer, G. H. Döhler, M. Betz, A. Leitenstorfer, Ballistic High-Field Transport In Mesoscopic Confining Potentials - Observation Of THz Oscillations In Ga_xAl_{1-x}As Heterostructures , *Physica E* **12** , 454-457 (2002)
- Axel Schwanhäußer¹, Martin Eckardt¹, Lucio Robledo¹, Gottfried Döhler¹, Markus Betz², Stephan Trumm² und Alfred Leitenstorfer²; ¹Institut für technische Physik, Lehrstuhl für Halbleiterphysik , Erwin-Rommel-Str.1, 91058 Erlangen; ²Physik Departement E11, Technische Universität München, 85747 Garching; Nichtgleichgewichtsladungsträgertransport in GaAs - Neues Konzept mit unipolarem Transport und zeitlich und räumlicher Auflösung (2002), DPG Tagung 2002
- L. Robledo, A. Schwanhäußer, M. Eckardt, G. H. Döhler, H. Lutz, A. Seilmeier, M. Betz, A. Leitenstorfer, Transient high-field transport and electro-optical properties of Al_xGa_{1-x}As-grading-structures , *Physica E* **13** , 708-710 (2002)
- H. W. Lutz, A. Schwanhäußer, M. Eckardt, L. Robledo, G. Döhler and A. Seilmeier, High-field electron transport in GaAs/Al_xGa_{1-x}As p_i_n_i_p-structures investigated by ultrafast absorption changes , *Physica E* **13** , 802-805 (2002)
- M. Eckardt, A. Schwanhäußer, L. Robledo, A. Friedrich, P. Pohl, P. Kiesel, S. Malzer, G.H. Döhler, LT-GaAs Recombination layers used in photomixers based on quasi-ballistic transport, 3rd Symposium on non-stoichiometric III-V compounds (ISBN 3-932392-33-7) , 37-42 (2001)
- A. Schwanhäußer „Which contribution towards non-proliferation of nuclear weapons can be provided by the additional protocol to the non proliferation treaty? – An Analysis under special consideration of the Iranian nuclear program“, Master Thesis (published July 2005 at the Institute for Peace Research and Security Policy, Hamburg)

Participation at international conferences

(with own contributions)

January 2001

Workshop on Quantum Heterostructures and THz Electronics, Regensburg, Deutschland

August 2001

12th International Conference on Nonequilibrium Carrier Dynamics in Semiconductors (HCIS-12), New Mexico, USA

September 2001

Sixth International Conference on Intersubband Transitions in Quantum Wells, Asilomar, Californien

January 2002

Workshop on Quantum Heterostructures and THz Electronics, Regensburg, Deutschland

July 2002

26th International Conference on the Physics of Semiconductors, Edinburgh, Scotland

January 2003

Workshop on Quantum Heterostructures and THz Electronics, Regensburg, Deutschland

August 2005

Participating at the summer symposium "International Symposia on Science and World Affairs" sponsored by the Union of Concerned Scientist, Princeton, USA (August)

September 2006

"An EU Foreign and Security Policy with Global Reach? Actors, Procedures, Capabilities and Effectiveness", Institute for European Politics, Brussels, Belgium

March 2007

European Safeguards Research and Development Association: "Course on Safeguards and Non-proliferation", Ispra, Italy

Scholarships

1 year, Postgradual studies scholarship, financed by the "Deutsche Stiftung für Friedensforschung" (DSF); October 2004-September 2005

2 years, Postdoctoral scholarship granted by the "Volkswagen Foundation"; "EFSPS - European Foreign and Security Policies" programme; September 2007 – September 2009

Other activities

1991-1994

cooperation in a youth newspaper of the media centre "Parabol", Nuremberg, Germany

1993-1995

cooperation in a school newspaper of the des Labenwolf Gymnasiums Nürnberg, Germany

since 1990

club sports: tennis, hockey

Travel activities

1991

language course (English) in Exmouth, England

1992

pupil exchange program with Nice, France

1992

youth exchange program, Moscow, Russia

1985-2007

private journeys to: Indonesia, Lao, Vietnam, Malaysia, United States of America, Venezuela, Morocco, Libya, Egypt, Australia, Jordan, United Arab Emirates, Cuba, Turkey, Greece, Russia, Ecuador, Mexico, Dominican Republic, Oman, Sri Lanka, Syria, Myanmar, Thailand, Belize, Guatemala, Fiji, New Zealand, Namibia, India, Iran, Pakistan, Cambodia

Hobbies

travelling, photography, sports, cooking

special skills

solid computer knowledge (MS Office, Origin, Corel, internet applications, etc.)

knowledge of languages: fluently English, basics in French

experiences in management of a small company and an international scientific workgroup; supervision of scientific internships

References

Prof. Gottfried Döhler, FA-University Erlangen, Institute for Technical Physics, chair for semiconductor physics, Erlangen, Germany

Prof. Arthur Gossard, University of Santa Barbara California, Materials Department, Santa Barbara USA

Prof. H.J. Giessmann, Deputy-Director of the Institute of Peace Research and Security Policy (IFSH), Hamburg, Germany

Prof. Alfred Leitenstorfer, Technical University of Munich, Department E11, Munich, Germany

Dr. Götz Neuneck, Institute of Peace Research and Security Policy (IFSH), Hamburg, Germany

Marital status

unwed