

JÖRG SCHMIEDMAYER

• PERSONAL INFORMATION

Family name, First name: Schmiedmayer, Jörg
Researcher unique identifiers: ORCID: 0000-0001-7799-5614
Research ID: B-4717-2008
Date of birth: 1960-08-13
Nationality: Austria
URL for web site: www.atomchip.org



• EDUCATION

1997-05 Habilitation: Experimental Physics (Univ. Innsbruck)
1987-12 PhD in Experimental Physics: *Measurement of the Electric Polarizability of the Neutron*
TU-Wien, Austria
1983-06 Diplomingenieur (Master) Thesis: Experimental High energy Physics (CERN)
Faculty of Physics, TU-Wien, Austria

• CURRENT POSITION(S)

2007 – Full Professor (Chair), Faculty of Physics, TU-Wien, Austria
2010 – Guest Professor: National Institut of Informatics (Tokyo, Japan)
2017 – Guest Professor: Peking University (BeiJing, China)

• PREVIOUS POSITIONS

2000 – 2007 Professor (C4) Faculty of Physics, University of Heidelberg, Germany
2002 – 2004 Guest Professor Peking University, BeiJing, China
1997 – 2000 Assoc. Prof. with tenure Inst. Experimentalphysik, Univ. Innsbruck, Austria
1995 – 1997 Ass. Prof. Inst. Experimentalphysik, Univ. Innsbruck, Austria
1991 – 1995 Postdoctoral researcher / research fellow at MIT, USA
1990 – 1991 Postdoctoral researcher / research fellow at Harvard, USA
1987 – 1990 Universitätsassistent Atominstitut, TU-Wien, Austria

• FELLOWSHIPS AND AWARDS

2012 Wissenschaftspreis der Stadt Wien
2012 ERC advanced grant
2006 Wittgenstein Prize, Austria
1996 *European Optics Prize*, European Optical Society (with A. Zeilinger + coll.)
1994-1997 APART Fellowship, Austrian Academy of Science
1992 Excellence in Research and Development: Oak Ridge National Laboratory
1990-1992 Erwin Schrödinger Fellowship, Austrian Science Foundation
1988 *Viktor Hess prize* (Austrian Physical Society)

• ORGANISATION OF SCIENTIFIC MEETINGS (selection)

2008-2022 *Quantum Optics*: Bi-annual winter conference at Universitätszentrum Obergurgl: (together with HC Nägerl and H. Ritsch), Obergurgl, Austria
2018/04-05 *Quantum Path*: Thematic program at the Erwin Schrödinger Institut, Vienna, Austria (together with F. Essler, G. Mussardi, G. Sierra and F. Verstrate)
2017/07 *Correlations and Entanglement in and out of Equilibrium: From Cold Atoms to Electrons*, Summer program Aspen center for Physics (together with M. Parish, D. Pekker and R. Hulet), Aspen, CO, USA
2014/07-08 *Many-Body Quantum Systems far from Equilibrium* Summer program Aspen center for Physics (together with M. Rigol, U. Bouvensiepen and J. Freericks), Aspen, CO, USA
2012/09 *Nonequilibrium dynamics and thermodynamics in closed interacting quantum systems* (together with A. Polkovnikov, D. Huse, A. Silva), KITP Santa Barbara, CA, USA
2012/08 *Quantum Communication Measurement and Computation* (QCMC 2012), Main organizer, Vienna, Austria

• INSTITUTIONAL RESPONSIBILITIES

2020 – now	Member at Aspen Center for Physics
2016 – now	Editorial Board, Quantum
2015 – now	Scientific Advisory Board, SciPost Physics
2013 – now	Member of numerous committees at the Austrian Academy of Science, AT
2010	Founding Member, Vienna Center for Quantum Science and Technology (VCQ), AT
2009 – 2013	Program Advisory Board, EMMI (Extreme Matter Institute) / GSI/ GER
2009 – 2012	Institute Director, Atominstitut, TU-Wien, Vienna AT
2007 – now	Faculty member, TU-Wien, Faculty of Physics, AT
2000 – 2007	Faculty member, University of Heidelberg, Faculty of Physics and Astronomy, GER
1995 – now	Member and Chairmen of numerous committees for evaluating and hiring faculty members at senior (tenured) and junior (tenure track) level world wide

• REVIEWING ACTIVITIES (if applicable)

2011 – now	Review panel member, ERC advanced grant, ERC synergy grant
2000 – now	Member of numerous conference scientific boards
2000 – now	External member of several search and tenure evaluation committees
1990 – now	Reviewer for numerous peer-review journals (e.g. PRL, PRA, NJP, Science, Nature,...)
1990 – now	Reviewer for numerous funding agencies (e.g. NSF, ISF, DFG, EU, ERC, CAS...)

• MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)

2013	Full member of the Austrian Academy of Science
2010	Corresponding member of the Austrian Academy of Science
Since 2005	Full member of the Wolfgang Pauli Institute
Since 1990	American Physical Society (Fellow since 2013)
Since 1987	Austrian Physical Society

• RESEARCH TOPICS (current):

- Matter wave interferometry: developing tools and applications to probe many-body quantum systems
- AtomChips: developing and applying integrated circuits for experiments with matter waves.
- Ultra-cold quantum gases: Building and controlling low dimensional many-body quantum systems
- Quantum memory: atomic ensembles to build a quantum repeater
- Hybrid quantum systems: Spin ensembles coupled to superconducting circuits
- Quantum systems out of equilibrium: Emergence of statistical mechanics from the microscopic unitary quantum evolution in the relaxation of isolated MBQuS, non-equilibrium quantum fields
- Quantum Simulation: Build, validate and apply emergent quantum simulators.
- Emergence in quantum physics and beyond

• MAJOR COLLABORATIONS:

- Non-equilibrium Quantum Fields: J. Berges, T. Gasenzer (Universität Heidelberg)
- Quantum many-body physics: E. Demler (Harvard/ETH-Zürich)
- Integrable models, 1d physics: F. Essler (Oxford)
- Quantum Measurement, Quantum Simulation: J. Eisert (FU Berlin)
- Quantum Information Science: Jian Wie PAN, (CAS, Shanghai)
- Quantum Information, Quantum Communication: Kae Nemoto (NII Tokyo), Bill Munro (NTT basic research laboratory Atsugi, Japan)
- QuFT in curved space time / analog Gravity: S. Weinfurter (Nottingham), B. Unruh (Vancouver)