Peter Reimann

Universität Bielefeld
Fakultät für Physik
Universitätsstr. 25
D-33615 Bielefeld

Phone: +49 521 106 6205
Fax: +49 521 106 6455
Email: reimann@physik.uni-bielefeld.de
ORCID-ID: orcid.org/0000-0001-5577-9486

10.10.1964 born in Basel (Switzerland)

Academic Education and Degrees

1984-1989 Studies of Physics at Basel University
03.04.1989 Diploma in Theoretical Physics
1989-1992 Ph.D. studies at Basel University
16.12.1992 Ph.D. in Theoretical Physics (summa cum laude)
22.11.2000 Habilitation at Augsburg University (Germany)

Employment and Professional Career

1993 Postdoc at the Paul Scherrer Institut (Switzerland)
1993-1995 Postdoc at Hasselt University (Belgium)
1995-1996 Postdoc at Eötvös Lorand University, Budapest (Hungary)
1996-2000 Academic co-worker (Assistent) at Augsburg University
2000-2002 Privatdozent at Augsburg University
since 2002 Professor at Bielefeld University

Miscellaneous

since 2001 Organizer of 11 international workshops and symposia
2005–2010 Co-Editor of EPL (former Europhysics Letters)
2009 Outstanding referee of the Physical Review and Physical Review Letters
2011–2014 Advisory Board Member of EPL
2014–2020 Editorial Board Member of Physical Review Letters

Main Research Areas

- Transport phenomena far from equilibrium
- Basic questions in statistical physics
- Biophysics, micro- and nanofluidics
- Statistical physics of complex systems

Selection of 10 Important Publications (Peer-Reviewed Articles and Books)

[1] P. Reimann,
"Brownian motors: noisy transport far from equilibrium",
Phys. Rep. **361**, 57 (2002).

[2] P. Reimann,
"Typical fast thermalization processes in closed many-body systems",
Nat. Commun. **7**, 10821 (2016).

[3] P. Reimann,
"Foundation of statistical mechanics under experimentally realistic conditions",
Phys. Rev. Lett. **101**, 190403 (2008).

[4] L. Dabelow and P. Reimann,
"Relaxation theory for perturbed many-body quantum systems versus numerics and experiment",
Phys. Rev. Lett. **124**, 120602 (2020).

[5] A. Ros, R. Eichhorn, J. Regtmeier, T. T. Duong, P. Reimann, and D. Anselmetti,
"Absolute negative particle mobility",
Nature **436**, 928 (2005).

[6] P. Reimann, C. Van den Broeck, H. Linke, P. Hänggi, J. M. Rubi, and A. Perez-Madrid,
"Giant acceleration of free diffusion by use of tilted periodic potentials",
Phys. Rev. Lett. **87**, 010602 (2001).

[7] P. Reimann,
"Generalization of von Neumann's approach to thermalization",
Phys. Rev. Lett. **115**, 010403 (2015).

[8] L. Dabelow and P. Reimann,
"Stalled response near thermal equilibrium in periodically driven systems",
Nat. Commun. **15**, 294 (2024).

[9] P. Reimann, M. Grifoni, and P. Hänggi,
"Quantum ratchets",
Phys. Rev. Lett. **79**, 10 (1997).

[10] L. Bogunovic, M. Fliedner, R. Eichhorn, S. Wegener, J. Regtmeier, D. Anselmetti, and P. Reimann,
"Chiral particle separation by a nonchiral microlattice",
Phys. Rev. Lett. **109**, 100603 (2012).