

# CURRICULUM VITAE



## PETER HÄNGGI

Lehrstuhl für Theoretische Physik I  
Universität Augsburg  
Universitätsstr. 1  
D-86135 Augsburg

### PERSONAL DATA

Place of Birth: Bärschwil, Switzerland  
Date of Birth: 29. November 1950  
Nationalities: Switzerland and Germany

I am married to Gerlinde Hänggi and we have one son named Alexander.

Further details (diplomas, etc.) are available on  
<https://www.physik.uni-augsburg.de/theo1/hanggi/Curr.html>

### EDUCATION

1970  
1970-1974  
B. Sc. 1972  
M. S. 1974  
PH. D. 1977

Abitur (Matura) Math.-Nat. Gymnasium Basel  
Studies of physics at the University of Basel, Switzerland  
University of Basel  
University of Basel  
University of Basel

### MAJOR RESEARCH INTEREST

Theoretical Statistical Mechanics and Quantum mechanics

### RESEARCH EXPERIENCE

June 1986 - present

Full Professor (Ordinarius, C4), University of Augsburg  
(Lehrstuhl für Theoretische Physik I)

Sept. 1983 - Sept. 1987

Associate Professor, Polytechnic Institute of  
New York (with tenure), New York

Sept. 1980 - Sept. 1983

Assistant Professor of Physics, Polytechnic Institute of  
New York, New York

May 1979 - Sept. 1980

Postgraduate Research Associate,  
University of California, San Diego

May 1978 - May 1979

Visiting Professor, University of Stuttgart, Germany

April 1977 - April 1978	Research Associate, University of Illinois, Urbana-Champaign
Jan. 1977 - April 1977	Research Associate, University of Basel, Switzerland
	<b>PRIZES, HONORS &amp; AWARDS</b>
1970	Jacottet-Kung Prize, Basel, Switzerland
1977	Janggen-Pohn Prize, St. Gallen, Switzerland
1977	Max-Geldner Prize, Basel, Switzerland
1988	Fellow of the American Physical Society
Sept. 1994 - Nov. 2009	Member of the Board of the German Physical Society (DPG)
1995	Nicolás Cabrera Professorship of the Universidad Autónoma de Madrid, Madrid
Dec. 1997 - Dec. 2009	Boardmember of the regional section of the German Physical Society (Regionalverband Bayern e. V. der Deutschen Physikalischen Gesellschaft)
March 1998	Michael Visiting Professorship of the Weizmann Institute of Science, Rehovot, Israel
1998	Fellow of the JSPS (Japanese Society for the Promotion of Science) at the Institute for Fundamental Chemistry, Kyoto, Japan
1999	Fellow of the Institute of Physics (UK) and Chartered Physicist (CPhys)
2000 - 2003	Chair of the division of "Dynamics and Statistical Physics" of the German Physical Society
2000 - 2003	Member of the Advisory Council "Dresdner Herbstseminar"
2000 - 2005	Member of the DPG committee "Future of Scientific Publishing"
2001 - 2007	Elected member of the Board of the Statistical and Nonlinear Physics Division of the European Physical Society (EPS)
2001 - present	Elected external member of the MPI-PKS Dresden
2001 - present	Elected Scientific member of the Max-Planck-society
2002	Humboldt Honorary Research Award of the Foundation for Polish Science (Fundacja na Rzecz Nauki Polskiej)

2002	Extraordinary member of CeNS - Center for NanoScience
2003	Eminent Scientist Award - <a href="#">RIKEN</a>
2003	Elected member of the National Academy of Sciences <i>LEOPOLDINA</i>
May 2003	Evaluator for the program “Ramon y Cajal”, Spain
2004 --	Board member of the Krzyzowa Initiative for Quantum Information European Research Network
July 30, 2004	Institute of Physics Chartered Scientist Award (CSciCPhys/FInstP)
2005/2006	Dr. honoris causa ("Laurea magistralis honoris causa") in Physics, Università di Camerino, Italy; Dr. honoris causa, University of Silesia, Katowice, Poland; Dr. honoris causa, Universitat de Barcelona, Spain.
2005	Elected Foreign Fellow of the Am. Assoc. Adv. Science (AAAS)
2006	Dr. honoris causa, Tatar State University of Humanities and Pedagogical Sciences, Kazan, Russia
2006	Visiting Professorship in the Department of Physics, National University of Singapore (NUS); 2006 - 2008
May 14, 2006	Jagiellonian University Medal “Plus ratio quam vis”, Krakow in recognition for his most outstanding scientific achievements and his continued dissemination of statistical physics works which relate in spirit to the pioneering contributions by <i>Marian von Smoluchowski</i> .  The medal has been designed by Polish artist and sculptor, Jozef Sekowski, professor of the Academy of Fine Arts in Krakow.
May 31, 2006	Doctor honoris causa from the National Academy of Sciences of Ukraine
June 1, 2006	Award for the "Chair of Physics Elena Aizen de Moshinsky" from the National Autonomous University of Mexico (UNAM)
June 2007	Honorary Professor award from the Beijing Normal University, Beijing
April 2007	Elected ordinary member of the Academia Europaea, Physics and Engineering Sciences
February 12, 2008	Doctor rer. nat. honoris causa from the Humboldt University Berlin

2009	Distinguished Lecture Series at Asian Pacific Center for Theoretical Physics (APCTP) and Pohang University of Science and Technology (POSTECH)
2009	Doctor honoris causa from the Universidad de Sevilla, Spain
November 2009	Elected "Outstanding Referee" of the American Physical Society (APS)
December 2009	ScienceWATCH Fast breaking paper
December 2009	selected for ISI Highly Cited.com because of exceptional citation count in the field of Physics
2010	Centre for Theory in Natural Science (CTN) "Lindhard Lecture Prize 2010", University of Aarhus, Denmark, <a href="http://www.physik.uni-augsburg.de/theo1/hanggi/Curr.html">http://www.physik.uni-augsburg.de/theo1/hanggi/Curr.html</a>
2010	Dr. honoris causa from the Bogolyubov Institute for Theoretical Physics, Kiev
2011	The Lars Onsager Medal 2011 and The Lars Onsager Lecture Prize 2011 <a href="https://www.ntnu.edu/onsager/lecture">https://www.ntnu.edu/onsager/lecture</a>
2012	Director of the International School of Statistical Mechanics at the Ettore Majorana Foundation and Centre for Scientific Culture
June 2013/2015/2017/2019	Elected member for the European Research Council (ERC)-panel PE 3 (Physical and Engineering Sciences, Condensed Matter) and reviewer for the panels: PE 3, PE 2 (Fundamental Sci.), PE 5 (Chemistry and Materials)
May 2014	Elected member of the European Academy of Sciences (EURASC)
December 2014	Distinguished scientist award and David Ben Gurion <a href="#">medal</a> , Ben-Gurion University of the Negev, Israel (10.12.2014)
May 2015	Elected outstanding reviewer status Elsevier publications
November 2015	Elected foreign honorary member to the Academia Română
April 2016	Dr. honoris causa, Lobachevsky University, Nizhny Novgorod, Russia
March 2018	Blaise Pascal medal in Physics from the European Academy of Sciences (EURASC)
November 2018	Honorary Professor, Huaqiao University, Xiamen, China

November 2018	15.11.2018: Marian-Smoluchowski-Emil-Warburg-Prize, commonly awarded by the German and the Polish Physical Societies (ceremony in 2019). <a href="https://www.dpg-physik.de/auszeichnungen/dpg-preise-mit-anderen-organisationen/marian-smoluchowski-emil-warburg-physik-preis/preistraeger">https://www.dpg-physik.de/auszeichnungen/dpg-preise-mit-anderen-organisationen/marian-smoluchowski-emil-warburg-physik-preis/preistraeger</a>
April 2019	Award: “Senior Member Nanosystems Initiative Munich” (NIM)
April 2019	Member of Committee: Evaluation for “National Centres of Competence in Research (NCCR), Switzerland
Sept. 27, 2022	American Physical Society’s 2023 Lars Onsager Prize, which recognizes outstanding research in theoretical statistical Physics including the quantum fluids “ <i>For development of Brownian motors and pioneering contributions to nonequilibrium statistical physics, relativistic and quantum thermodynamics.</i> ” <a href="https://www.aps.org/programs/honors/prizes/onsager.cfm">https://www.aps.org/programs/honors/prizes/onsager.cfm</a>
January 2024	Elected to the Industry Academy in the section International Artificial Intelligence Industry Alliance (AIIA).
July 22 2024	Honorary Medal „De scientia et humanitate optime meritis“ by the Czech Academy of Sciences <a href="https://www.avcr.cz/en/about-us/awards/medals-of-the-cas/honorary-medal-de-scientia-et-humanitate-optime-meritis/">https://www.avcr.cz/en/about-us/awards/medals-of-the-cas/honorary-medal-de-scientia-et-humanitate-optime-meritis/</a>

### **EDITORIAL ACTIVITIES**

June 2011 - Dec. 2016	Editor-in-chief, European Physical Journal B (EPJ B)
Jan. 2003 - Dec. 2009	Editorial Board Member, Physical Review E
May 1997 - May 2002	Co-Editor, Europhysics Letters
May 2002 - December 2010	Advisory Editor, Europhysics Letters
Jan. 1994 – December 2012	Advisory Editorial Board Member, Chemical Physics
April 1998 - January 2008	Editor, New Journal of Physics
June 2001 - present	Advisory Editorial Board Member, Physica A
Dec. 2001 - present	Editorial Board Member, Lecture Notes in Physics
Nov. 2003 - January 2011	Editorial Scientific Committee Member, Physical Biology
March 2004 - January 2011	Member of the Advisory Editorial Board, ChemPhysChem
March 2005 - 2007	Member of the Scientific Advisory Committee (SAC) for "European Physical Journal" (EPJ) as the representative of the Phys. Soc. of Germany (Dt. Phys. Gesellschaft, DPG); SAC-Chair elect 2006, SAC-Chair (2007).
September 2006 - present	Editorial board: International Review of Electrical Engineering (IREE)
March 2007 - present	Editorial board of International Review of PHYSICS (IREPHY)
May 2007 - present	Editorial board member: The Open Chemical Physics Journal
October 2008 - present	Editorial board of The European Physical Journal Special Topics (EPJ-ST)
March 2009 - present	Intern. Advisory Editorial board of Ukrainian Journal of Physics

February 2012 - present

Editorial Advisory board VERSITA Emerging Science Publishers (Physics, Materials Science, Astronomy)

October 2013 - present

Scientific Reports (Nature Publ. Group)

April 1997 - present

Member of the Institute of Interdisciplinary Computer Science, University of Augsburg, Germany

## ADDITIONAL POSITIONS

## PATENTS

1. Controlled Stochastic Resonance Circuit  
US Patent 6, 285, 249 B1 Sept 4, 2001-Jan 21, 2020
2. Noise-Induced Transport of microscopic particles in macroporous materials  
PCT (Europe, USA, Japan) EP 00/01 369  
German Patent: 199 07 564  
February 12, 2004 - February 2019

## Bibliometric Data

### Goggle Scholar:

<https://scholar.google.de/citations?hl=de&user=0Dt1AtUAAAJ>

**ResearcherID** on the WOS: **B-4457-2008**.

Average citations in recent years: ~ 2200-2500.

Peter Hanggi has published over 700 original papers; **101** linked publications of those are cited at least **101** times (WOS h-index= **98+3 = 101** (incl. 3 articles in books > 200); Google Scholar h = **119**), as of August 2024. Total # cites ISI-WoS (all Databases): > 54.000; Google Scholar > 73.000.

## RESEARCH AREAS

- Biophysics, Transport of Ligands, Ion Channels
- Brownian motion -- Classical and Quantum, Brownian Motor dynamics
- Normal and anomalous diffusion in confined and corrugated media/channels
- Colored Noise, Nonmarkovian Dynamics

- Dissipative Quantum Mechanics, Quantum Tunneling Phenomena
- Time-dependent driven Quantum Dynamics; Quantum (Floquet) Control for transport and tunneling
- Elementary Particle Physics (Muon decay in orbit)
- Granular Media
- Microfluids and Fluctuating Hydrodynamics
- Molecular Electronics
- Path Integrals, Tunneling Time, Functional Methods, Math. Methods
- Quantum Information and Quantum Computing
- Nonlinear Dynamics
- Rate Theory, Metastability and Nucleation
- Statistical Mechanics in Equilibrium and Non-Equilibrium: Classical and Quantum
- General; Stochastic Processes: Non-Markovian regime, first passage time statistics, time evolution of open dynamics/operators -- beyond Lindblad regime
- Stochastic Resonance: Classical and Quantum
- Synchronization
- Transport Theory, Classical and Quantum, Surface Growth