

Resumé



Contact

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Personal informationen

date of birth: 30 July 1971

place of birth: Dresden

nationality: german

marrital status: married to Dr.
Karin Thier, two daughters

Languages

- English: fluent
- Russian: school knowledge
- French: basic knowledge
- Spanish: basic knowledge
- German: mother tongue

Competences

- mathematical physics, numerical and analytical methods in Quantum Field Theory, Cosmology, Astrophysics, and coherent diffraction imaging
- several programming languages
- academic teaching and communication, research, research supervision

Membership

Deutsche Physikalische
Gesellschaft,
Buendnis 90/Gruene

Positions

1/2020-present IAV (fulltime)

development engineer Autonomous Driving

9/2020-12/2020 Duale Hochschule Baden-Wuerttemberg, Karlsruhe

teaching assignment on Electrical Engineering

11/2008-9/2019 Karlsruher Institut für Technologie (full time)

staff scientist and group leader; research in theory of coherent diffraction imaging, live-cell X-ray phase-contrast microtomography and low-temperature photon physics at Institute for Photon Science and Synchrotron Radiation, teaching of theoretical optics, supervision of Master and PhD students, administrative duties

8/2016-9/2016 Institut Nonlineaire de Nice, CNRS (full time)

visiting directeur de la recherche,
research on quantum field theory and cosmology

3/2007 – 9/2008 Universität Karlsruhe (full time)

Postdoctoral fellow at Institut für Theoretische Physik, research and teaching activities in Quantum Field Theory, Cosmology, and Astrophysics

3/2006 – 2/2007 Universität Heidelberg (full time)

Postdoctoral fellow at Institut für Theoretische Physik, research and teaching in Quantum Field Theory, Cosmology, Astrophysics, and Statistical Physics

10/2004 – 12/2005 Universität Frankfurt (full time)

Postdoctoral fellow at Institut für Theoretische Physik, research and teaching in Quantum Field Theory

as of 07/2004 Universität Heidelberg

Privatdozent at Institut für Theoretische Physik, advanced lectures in Quantum Field Theory and Cosmology (full-day, week-long block courses twice a year), supervision of 11 thesis projects and research in Yang-Mills theory, cosmology, and astrophysics

10/2002 – 9/2004 Universität Heidelberg (full time)

Postdoctoral fellow at Institut für Theoretische Physik, research and teaching in Quantum Field Theory and phenomenology of strong interactions

1/2001 – 9/2002 Werner-Heiseberg-Institut, MPI München (full time)

Postdoctoral fellow, research in Quantum Field Theory and Cosmology

1/2000 – 12/2000 University of Minnesota (full time)

Postdoctoral fellow at Theoretical Physics Institute, research in Quantum Field Theory, Cosmology, and phenomenology of strong interactions, funded by Deutscher Akademischer Austauschdienst

Resumé

3rd party funding

grants of DAAD und DFG;
externally funded research stays
(University of Cape Town 1998,
UC Santa Barbara 2005, SUNY
at Stony Brook 2008); successful
co-proposer of COST MP1207 –
*Enhanced X-ray Tomographic
Reconstruction*, visiting
professorship in Quantum Field
Theory (Inst. Nonlineaire de Nice)
funded by CNRS 2016

Author

> 95 publications in peer-reviewed
journals; Book 'The
Thermodynamics of Quantum
Yang-Mills Theorie' (World
Scientific 2012,2016)

Referee

J. Phys. A, Eur. Phys. J. C, J.
High Energy Phys., Annals of
Physics (referee award 2014),
Prog. Nucl. Part. Phys., Annalen
d. Physik, Mathematical Reviews,
International Scholarly Research
Network, Austrian Science Fonds,
Netherlands Organisation for
Scientific Research, Alexander-v.-
Humboldt-Stiftung, J. Appl.
Optics, PloSOne, OpticsExpress,
SpringerPlus, European
Commission (COST), Advanced
Photon Source (Argonne National
Laboratory), European Physics
Letters, Optica, Foundations of
Physics, Nuclear Inst. and
Methods in Physics Research A,
Scientific Reports, Appl. Phys.
Letters, Phys. Rev. Letts., Appl.
Phys. Exp., Phys. Rev. A

Scientific team work

supervision of 11 Diploma and
one PhD theses; team leader
involving Northwestern U,
Argonne National Lab, KIT, many
invited talks at international
conferences and workshops

Organization of scientific meetings

organizer of symposium
„Analysis of Quantum Field
Theories I,II,III“ within ICNAAM in
2011, 2012,2017,2018), co-
organizer 4th,5th Winter
Workshop on Nonperturbative
QFT, Institute Nonlineaire de Nice
(CNRS, 2015, 2017)

Award

Lessingmedal in Gold (1988)

Education

Habilitation

7/2004 Universität Heidelberg
topic in strong interactions (quark-hadron duality and nonlocalities)

Doctorate

11/1999 Universität Tübingen („Magna cum laude“)
topic in strong interactions, four-month research stay at University of
Cape Town

University studies

10/1994 – 03/1997 Universität Heidelberg
Theoretical Physics

03/1997 Diplom („Sehr gut“)

Diploma thesis at Universität Heidelberg in Quantum Field Theory

09/1993 – 08/1994 Lakehead University, Ontario

Physics und Mathematics, Exchange programme between Baden-
Württemberg and Ontario

08/1994 Bachelor of Science

cumulative course work at Lakehead University, Ontario

03/1993, 08/1994 Vordiplome Physik, Mathematik

equivalent to Bachelor degrees, Universität Heidelberg

10/1991-08/1994 Universität Heidelberg

Physics

School

1988 – 1990 Abitur, Dresden

Erweiterte Oberschule ``Pestalozzi``, with distinction

1978 – 1988 Polytechnical education, Dresden

Polytechnische Oberschule ``Edmund Fink``, participation in several
mathematics olympiads, with distinction

1979 – 1990 State Music School, Dresden

Plectrum and concert guitar including music theory

Civil service (substitute for service in armed forces)

09/1990 – 08/1991 Community Hospital , Dresden Neustadt

Operating room and surgical station

Bad Bergzabern, 06 January 2021

