

# Prof. Dr. Rudolf Gross

## List of Major Research Grants

November 2024

### Personal Details

Name: **Prof. Dr. Rudolf Gross**  
Director at Walther-Meißner-Institute (BAdW)  
Full Professor for Technical Physics (TUM)

Office address: Walther-Meißner-Institut  
Technische Universität München und  
Bayerische Akademie der Wissenschaften  
Walther-Meißner-Str. 8, 85748 Garching  
Phone: +49 – 89 289 14249  
Fax: +49 – 89 289 14206  
E-Mail: [Rudolf.Gross@wmi.badw.de](mailto:Rudolf.Gross@wmi.badw.de)  
Web: [www.wmi.badw.de](http://www.wmi.badw.de)  
ResearcherID: [A-6227-2012](https://orcid.org/0000-0003-4524-7552)  
ORCID ID: [orcid.org/0000-0003-4524-7552](https://orcid.org/0000-0003-4524-7552)  
Google Scholar: [Rudolf Gross](https://scholar.google.com/citations?user=RudolfGross)  
Scopus: [16197162000](https://scopus.com/authid/detail.url?authorID=16197162000)



### Scientific Career

1987 Ph.D. Degree in Physics, University of Tübingen

1987 Visiting Scientist, Electrotechnical Laboratory, Tsukuba, Japan

1988 – 1989 Postdoctoral Research Associate, University of Tübingen

1989 – 1990 Visiting Scientist, IBM T.J. Watson Research Center, Yorktown Heights, New York, USA

1990 – 1993 Postdoctoral Research Associate, University of Tübingen

1993 – 1995 Assistant Professor, University of Tübingen

1996 – 2000 Full Professor, Chair for Applied Physics, Institute of Physics II, University of Cologne  
Director of the Institute of Physics II

since 2000 Full Professor, Chair for Technical Physics (E 23), Technical University of Munich  
Director of the Walther-Meißner-Institute for Low-Temperature Research of the Bavarian Academy of Sciences and Humanities

## Research Grants (without DFG Individual Grants)

- “Munich Quantum Valley e.V. (MQV)”, since 01.10.2021, principal investigator, coordinator of consortium QTPE (Quantum Technology Park & Entrepreneurship).
- Cluster of excellence “Munich Center for Quantum Science and Technology (MCQST)”, since 01.01.2019, spokesperson and coordinator of Research Unit C (Quantum Computing).
- Munich Quantum Valley Lighthouse Project “Networked Quantum Systems (NeQuS)”, since 01.01.2023, PI.  
Projects partners: WMI, MPQ, LMU, TUM.
- Munich Quantum Valley Lighthouse Project “Integrated Spin Systems for Quantum Sensors (IQSense)”, since 01.01.2023, PI.  
Projects partners: University of Würzburg (coordination), WMI, TUM.
- BMBF Project “Storage of Microwave Quantum Tokens in Electron and Nuclear Spin Ensembles (QuamToMe)”, project No. 16KISQ036, since 01.11.2021, PI.
- BMBF Joint Project “QUAntenRAdarTEam (QUARATE)”, project No. 13N15380, since 01.02.2021 – 31.10.2024, PI.  
Project partners: Rohde & Schwarz GmbH & Co. KG (coordinator), WMI, DLR, TUM.
- BMBF Joint Project “German Quantum Computer based on Superconducting Qubits (GeQCoS)”, project No. 13N15680, sub-project: “Scaling and Demonstrator”, 01.02.2021 – 31.01.2025, PI.  
Project Coordinator: S. Filipp (WMI)  
Project Partners: Jülich Research Center, Karlsruhe Institute of Technology, FAU Erlangen-Nuremberg, Fraunhofer Society, Infineon Technologies AG.
- Cluster of excellence “Nanosystems Initiative Munich (NIM)”, 01.11.2008 – 31.12.2018, PI, executive board member and coordinator of Research Area I (Quantum Nanophysics).
- EU Quantum Flagship Project “Quantum Microwave Communication and Sensing (QMICS)”, 01.10.2018 – 30.09.2021, PI.  
Projects partners: several European universities, research institutions, and companies.
- EU Collaborative Project (H2020-FETOPEN) “Magnetomechanical Platforms for Quantum Experiments and Quantum Enabled Sensing Technologies (MaQSens)”, 01.01.2017 – 21.10.2020, PI.  
Projects partners: several European universities, research institutions, and companies.
- International Max Planck Research School “Quantum Science and Technology (IMPRS-QST)”, 01.03.2016 – 29.02.2028, PI.  
Spokesperson: Ignacio Cirac  
Projects partners: Max Planck Institute of Quantum Optics, LMU, TUM, WMI
- International PhD program “Exploring Quantum Matter (ExQM)” within the Elite Network of Bavaria, project No. K-NW-2013-231, 01.06.2014 – 31.05.2024, PI.  
Projects partners: LMU, TUM, MPQ, WMI.
- DFG Collaborative Research Center 631 “Solid State Quantum Information Processing”, several sub-projects, 01.07.2003 – 30.06.2015, spokesperson and PI.

- Marie Curie Network (FP7-PEOPLE-2010-ITN) on “*Circuit and Cavity Quantum Electrodynamics (CCQED)*”, 01.12.2010 – 30.11.2014, PI.  
Projects partners: several European universities and research institutions.
- EU Collaborative Project (FP7-ICT-2011-C) on “*Quantum Propagating Microwaves in Strongly Coupled Environments (PROMISCE)*”, 01.12.2010 – 30.06.2015, PI.  
Projects partners: 10 European groups.
- DFG Priority Program 2137 “*Skyrmionics: Topological Spin Phenomena in Real-Space for Applications*”, sub-project: “*Spin Dynamics of Hybrid Skyrmion-Magnon Solitons*”, 01.07.2018 – 30.06.2021, PI.
- DFG Priority Program 1538 “*Spin-Caloric Transport (SpinCAT)*”, sub-project: “*Spin-dependent thermo-galvanic effects: experiment*”, 01.07.2011 – 30.06.2017, PI.
- DFG Priority Program 1285 “*Semiconductor Spin Electronics*”, sub-project: “*Spin injection, spin transport and controllable ferromagnetism in transition metal doped ZnO*”, 01.04.2007 – 31.08.2013, PI.
- DFG Priority Program 1157 “*Integrated Electro-ceramic Functional Structures*”, sub-project: “*New Functional Thin Film Systems Based on Transition Metal Oxides*”, 01.11.2003 – 31.10.2009, PI.
- DFG Research Unit 538 “*Doping Dependence of Phase Transitions and Ordering Phenomena in the Cuprate Superconductors*”, sub-projects: “*Single Crystal Growth of p- and n-Doped Cuprate Superconductors*” and “*Raman Spectroscopy in Cuprate Systems with Competing Ordering Phenomena*”, 01.03.2003 – 28.02.2010, PI.
- BMBF Joint Project “*Ultra-fast and Ultra-Low Loss Information Technology*”, sub-project: “*Noise Properties of Nano-SiGe Devices*”, project No. 13N7902, 01.08.1999 – 31.07.2002, PI.
- DFG Collaborative Research Project 341 “*Physics of Mesoscopic Metallic Systems*”, several sub-projects, 01.01.1996 – 21.12.2000, PI and member of the Executive Board.
- BMBF Joint Project “*Three-Terminal Devices Based on High-Temperature Superconductors*”, project Nos. 13N6434 and 13N6999, 01.05.1994 – 31.10.1997, PI.