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# Curriculum Vitae

## Hans J Briegel

Born on August 9, 1962, in Ochsenhausen, Germany, married, two children, German citizenship.

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### Education

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|-------------|---|
| 2002        | Habilitation in Theoretical Physics, Ludwig-Maximilians-University (LMU) Munich, Thesis on <i>Quantum information and computers</i>   |
| 1994        | Doctorate (PhD) in Physics, LMU Munich, Thesis on <i>Dissipative Jaynes Cummings model and its applications to microscopic lasers</i> |
| 1990        | Diploma (Master) in Physics, LMU Munich   |
| 1983 – 1990 | Studies of Physics and Philosophy at the University of Munich and the University of Edinburgh (1986-87), UK                           |
| 1982 – 1983 | Military service (Grundwehrdienst) in Germany   |
| 1973 – 1982 | High school (Gymnasium) in Isny/Allgäu, Germany   |
| 1969 – 1973 | Primary school (Grundschule) in Eisenharz/Allgäu, Germany   |

## Professional career

2003 – today	Full Professor, University of Innsbruck Head of the Institute of Theoretical Physics: 2005-2008
2017 – 2020	Visiting Professor, Department of Philosophy, University of Konstanz
2003 – 2014	Scientific Director at the Institute for Quantum Optics and Quantum Information (IQOQI), Austrian Academy of Sciences, Innsbruck
11/2004; 9/2006	Chair Professor, Tsinghua University, Beijing, China
2003	Offered a Chair in Theoretical Physics at the University of Düsseldorf (declined)
2002 – 2003	Privatdozent (~ <i>Senior Lecturer</i> ), University of Munich (LMU)
1997 – 2002	Wissenschaftlicher Assistent (~ <i>Lecturer</i> ), University of Munich (LMU)
1997 – 1998	TMR Postdoc, University of Innsbruck
1996 – 1997	Postdoctoral Fellow, Harvard University, and ITAMP, Harvard-Smithsonian Centre for Astrophysics, USA
1994 – 1995	Research Associate, Texas A&M University, USA

## Awards and fellowships

2023	Wittgenstein Award
2022	ERC Advanced Grant
2018	Fellow of the ELLIS Society
2013	PNAS Cozzarelli Prize in Physical and Mathematical Sciences
2013	Elected Corresponding Member of the Austrian Academy of Sciences Descartes Senior Fellowship, Descartes Centre for the History and Philosophy of the Sciences and the Humanities, University of Utrecht
2012 –	Honorary Visiting Professor, University of Bristol
1994 – 97	Feodor Lynen Fellowship of the Alexander von Humboldt Foundation
1991 – 93	Member of the Studienstiftung des Deutschen Volkes
1986 – 87	Fellowship of the German Academic Exchange Service (DAAD)

## Research topics

- Quantum information and computation
- Quantum machine learning
- Artificial intelligence in basic research
- AI-driven design of quantum experiment
- Agency and physics

## Scientific publications

- **168** publications in peer-reviewed journals
- More than **20000** citations in total (*Web of Science*)
- **30** original research papers with more than **100** citations
- **10** original research papers with more than **500** citations

The paper on the “Quantum repeater” (*Physical Review Letters* **81**, 1998) has been cited **2637** times according to *Web of Science* and has become a key reference in the field of long-distance quantum communication. The paper on the “One-way quantum computer” (*Physical Review Letters* **86**, 2001) has been cited **3534** times and was identified in 2010 by Science Watch/Thomson Reuters as the second most-cited paper in the field of quantum computation since 2000 (see <http://www.sciencewatch.com/ana/st/quantum/10augSTQuanBrie/>).

A nearly complete list of publications, including conference talks, seminars, and colloquia, can be found at <https://www.uibk.ac.at/th-physik/staff/briegel/>

## Selection of professional activities

2011 – 2017	Member of the Board of the Austrian Science Fund (FWF) as Reporter (alternate) for Theoretical Physics and Astrophysics
2018	Chair (w/ Vedran Dunjko & Katja Ried) of the Conference “Quantum machine learning plus”, September 17-21, 2018, Innsbruck Austria.
2014	Chair (w/ David Wineland) of the Gordon Research Conference on “Quantum Science”, July 2014, Stonehill College Easton, USA.
2011	Chair (w/ MA Martin-Delgado) of the First Meeting on “Quantum information meets statistical physics”, July 8-12, 2011, El Escorial, Spain.
2009	Chair of the First Joint Annual Meeting of the Austrian and Swiss Societies of Physics and Astrophysics (ÖPG, SPG, ÖGAA), Innsbruck, September 2-4, 2009.
2008	Chair of the International QICS Workshop on “Foundational structures of quantum information”, September 14-20, 2008, Obergurgl, Austria.
2005	Board member of the European Road Map committee for quantum information processing and communication (QIPC).
2005	Coordinator and author of the theory part of the first European Road Map for quantum information science.
since 2008	Member of the Austrian Physical Society (ÖPG).
1994 – 1999	Member of the American Physical Society (APS).
since 1991	Member of the German Physical Society (DPG).