

# Prof. Dr. Gernot Alber

## Personal Data

Date of birth: 31. Oktober 1957

Citizenship: Austria

Position: Professor of Theoretical Physics

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## Academic Degrees

- 1994 Privatdozent in Theoretical Physics, Universität Freiburg i. Br.
- 1991 Habilitation and Venia Legendi in Theoretical Physics,  
Universität Innsbruck
- 1985 Dr. rer. nat. (sub auspiciis praesidentis rei publicae),  
Universität Innsbruck
- 1981 Mag. rer. nat. , Universität Innsbruck

## Scientific Career

- 2002–now Professor of Theoretical Physics (C4),  
Technische Universität Darmstadt
- 1997–2002 Privatdozent, Theoretical Physics, Universität Ulm
- 1991 Member of the Institute for Theoretical Physics,  
University of California at Santa Barbara (USA)
- 1988–1997 Assistant Professor and Privatdozent, Universität Freiburg i.Br.
- 1986–1988 Postdoctoral Fellow, Universität Innsbruck  
(1986 Military Service)
- 1983–1985 Research Associate, Joint Institute for Laboratory Astrophysics,  
Boulder (USA)
- 1981-1983 Research Assistant, Universität Innsbruck

**Fields of Specialization:** Theoretical Quantum Optics, Quantum Information Theory,  
Foundations of Quantum Theory

## Some recent publications:

1. T. Kiss, S. Vymetal, L.D.Toth, A. Gabris, I. Jex, G. Alber, Phys. Rev. Lett. 107, 100501 (2011)  
Measurement-Induced Chaos with Entangled States
2. J. Novotny, G. Alber, I. Jex, Phys. Rev. Lett. 107, 090501 (2011)  
Entanglement and Decoherence: Fragile and Robust Entanglement
3. J. Novotny, G. Alber, I. Jex, NJP 13, 053052 (2011)  
Asymptotic Dynamics of Qubit Networks under Randomly Applied Controlled Unitary Transformations
4. M. Ali, A.R.P. Rau, G. Alber, Phys. Rev. A 81, 042105 (2010)  
Quantum discord for Two-Qubit X States
5. M. Stobinska, G. Alber, G. Leuchs, EPL 86, 14007 (2009)  
Perfect Excitation of a Matter Qubit by a Single Photon in Free Space
6. J. Wilms, Y. Disser, G. Alber, I. C. Percival, Phys. Rev. A 78, 032116 (2008)  
Local Realism, Detection Efficiencies, and Probability Polytopes