

## Curriculum Vitae

**Dr. rer. nat. Dennis Kretschmann,**  
born 16 Sept. 1977 in Braunschweig,  
Germany



### Professional Experience

---

since June 2023	Technically Qualified Judge at the Unified Patent Court (Electricity, part-time)
since Jan. 2025	owner and patent attorney, dk-ip (part-time); fields of expertise: electricity and electronics, physics, medical technology, software, information technology, optical data carriers, semiconductors, industrial control, automotive
Jan. 2015 – Dec. 2024	Partner at Boehmert & Boehmert: representation of clients before the EPO and the GPTO; drafting and prosecuting patent applications; oppositions; infringement and nullity proceedings before the German courts; consultancy on technology transfer, licensing agreements, employee invention law
Febr. 2014	appointed adjunct professor at National Taiwan University of Science and Technology (NTUST), Taipei: lectures for graduate students on European patent law, the unitary patent system and the UPC
since Aug. 2011	registered European Representative
March 2011	passed European Qualifying Examination
since Dec. 2010	German Patent Attorney; continued work for Boehmert & Boehmert, Munich
24 Nov. 2010	passed German Patent Bar Examination, grade: <i>vollbefriedigend</i>
Febr. – Nov. 2010	trainee with the German Patent and Trademark Office and the German Federal Patent Court, Munich

Dec. 2009 – Jan. 2010	trainee with the 2nd Senate (for patent law) at Oberlandesgericht (Higher Regional Court) Düsseldorf
Nov. 2007 – Nov. 2009	patent attorney trainee at Boehmert & Boehmert, Munich
April – Oct. 2007	Postdoctoral research fellow at Dipartimento di Fisica A. Volta, Università degli Studi di Pavia, Italy, in the field of quantum information technology
Sept. 2005 – Sept. 2006	Research fellow at the Centre for Quantum Computation, University of Cambridge, UK
Aug. 2003 – Sept. 2005 Oct. 2006 – Mar. 2007	Research fellow at the Institute for Mathematical Physics (IMaPh), TU Braunschweig, Germany

## Education

---

12 Mar. 2007	Doctorate in Theoretical Physics, TU Braunschweig; Grade: <i>mit Auszeichnung</i> (with distinction)
Aug. 2003 – Mar. 2007	PhD student in quantum information technology, TU Braunschweig and University of Cambridge
2 July 2003	Diploma in Physics, TU Braunschweig; Grade: <i>mit Auszeichnung</i> (with distinction)
Oct. 2001 – June 2003	Studied physics at TU Braunschweig, with focus on quantum optics, quantum information theory, high energy physics
July – Sept. 2001	Summer Fellow at Deutsches Elektronensynchrotron (Desy), Hamburg
Aug. 2000 – June 2001	Fulbright Scholar, University of Tennessee and Oak Ridge National Laboratory
28 Sept. 1999	Pre-Diploma Examination, TU Braunschweig; Grade: <i>sehr gut</i> (very good)
Oct. 1997 – July 2000	Studied physics at TU Braunschweig
9 June 1997	Final secondary-school examinations (Allgemeine Hochschulreife), Gymnasium Julianum, Helmstedt; Average Grade: 1.0

## Scholarships

---

Apr. – Oct. 2007	Postdoc Scholarship from the German Academic Exchange Service (Deutscher Akademischer Austauschdienst, DAAD), Dipartimento di Fisica, Università di Pavia, Italy
Sept. 2005 – Sept. 2006	DAAD PhD Scholarship, Centre for Quantum Computation, University of Cambridge, UK

July – Sept. 2001	Summer Fellow, Deutsches Elektronensynchrotron (Desy), Hamburg
Aug. 2000 – June 2001	Fulbright Scholarship, Oak Ridge National Laboratory and University of Tennessee

## Languages

---

German	mother tongue
English	fluent
French, Italian	intermediate

## Leisure

---

sailing, mountaineering, travel to little-visited places, Italian culture, drama, Expressionist art

## Scientific Publications

---

D. Kretschmann, D. W. Kribs, R. W. Spekkens: *Complementarity of Private and Correctable Subsystems in Quantum Cryptography and Error Correction*; Phys. Rev. A 78 (2008) 32330

D. Kretschmann, D. Schlingemann, R. F. Werner: *A Continuity Theorem for Stinespring's Dilation*; J. Func. Anal. 255 (2008) 1889

D. Kretschmann, D. Schlingemann, R. F. Werner: *The Information-Disturbance Tradeoff and the Continuity of Stinespring's Representation*; IEEE Trans. Inf. Th. 54 (2008) 1708

G. M. D'Ariano, D. Kretschmann, D. Schlingemann, R. F. Werner: *Reexamination of Quantum Bit Commitment: the Possible and the Impossible*; Phys. Rev. A 76 (2007) 32328

D. Kretschmann: *Capacity for Quantum Information*; in Eds. J. P. Francoise, F. G. Naber, S. T. Tsou: Encyclopedia of Mathematical Physics; Elsevier, Amsterdam 2006, p. 424

D. Kretschmann, R. F. Werner: *Quantum Channels with Memory*; Phys. Rev. A 72 (2005) 62323

D. Kretschmann, R. F. Werner: *Tema Con Variazioni: Quantum Channel Capacity*; New Journal of Physics 6 (2004) 26

München, 18 Febr. 2026



Dennis Grottel