



Curriculum Vitae: Prof. Dr. Fedor Jelezko

Date and Place of Birth: 12 May 1971, Minsk, Belarus
German citizen
Married, 1 son

Academic Appointments

Feb 2011 – to date: Full Professor and Director of the Institute for Quantum Optics and, Department of Physics, Ulm University, Ulm, Germany.

Mar 2007– Jan 2011: Lecturer, Senior lecturer (tenured): Physics Department, University of Stuttgart

Jan 2007 – Dec 2010: Visiting Professor, ENS Cachan, France.

Oct 1999 – Mar 2007: Research Assistant, 3. Physical Institute, University of Stuttgart

International Prizes/Awards/Academy memberships.

1. PhD Fellowship of French Government, 1995
2. Fellowship “Eliteförderung der Landesstiftung Baden-Württemberg”, 2004.
3. Walter-Schottky Prize of German Physical Society (DPG) for the work on quantum information processing with spins in diamond, 2008
4. Offer for endowed chair in biophysical sciences, University of Melbourne (2009)
5. Offer for Experimental Physics Chair at Aachen University of Technology (2010)
6. ERC Synergy Grant (2013)
7. Full membership of Heidelberg Academy of sciences (2014)

Publication Record

More than 170 papers in refereed international journals including 5 articles in Science, 2 articles in Nature, 18 articles in the Nature family of journals (Nature Materials, Nature Physics, Nature Nanotechnology, Nature Photonics, Nature Communications). This work has achieved more than 10 000 citations and an H-Index of 49. Jelezko listed among most cited researchers in Thomson-Reuters list (2014 and 2015).

Leadership of Major Funding Initiatives:

March 2010-March 2013, Coordinator (German side), “Quantum computing in isotopically engineered diamond”, DFG (FOR 1482) -JST (Japanese Science and Technology Agency) research initiative, Value: € 4,000,000

April 2011-March 2014, Coordinator “Diamond Based Atomic Nanotechnologies” EU FP7 STREP, Value: € 3,680,000

January 2006- December 2009, coordinator ERA Nanoscience EU network “Nano engineered diamond for quantum information technologies” (NEDQIT), Value: € 800,000

January 2013, ERC Synergy Grant (together with Martin Plenio and Tanja Weil), € 10 200 000

Co-founder of Centre for quantum biosciences (total budget of the new research building and infrastructure 27 MEuro)

Member of Center for engineered quantum systems (Australia)

Co-founder NVision GmbH (start up company)

Memberships to Editorials Boards of International Journals.

Invited Editor, New Journal of Physics “Focus on Diamond-Based Photonics and Spintronics

Invited and Plenary presentations

In the period 2002 – 2015 Jelezko has presented more than 100 invited talks and lectures at international conferences, more than 30 seminars and colloquia and 5 International Summer Schools.

Organisation of International conferences

In the period 2002 – 2015 Jelezko, as a member of the program committee, co-organised the Hasselt conference “Defects in semiconductors”, WE-Heraeus-Seminar: Hybrid Quantum Systems (2012) and series of conferences “Quantum Diamond (QDiamond 12 and QDiamond 14)

Selected publications

1. London P, Scheuer J, Cai JM, Schwarz I, Retzker A, Plenio MB, Katagiri M, Teraji T, Koizumi S, Isoya J, Fischer R, McGuinness LP, Naydenov B, Jelezko F. Detecting and Polarizing Nuclear Spins with Double Resonance on a Single Electron Spin. *Physical Review Letters*. 2013 Aug 5;111(6), 067601.
2. Neumann P, Beck J, Steiner M, Rempp F, Fedder H, Hemmer PR, Wrachtrup J, Jelezko F. Single-Shot Readout of a Single Nuclear Spin. *Science*. 2010 Jul 30;329(5991):542-4.
3. Ladd TD, Jelezko F, Laflamme R, Nakamura Y, Monroe C, O'Brien JL. Quantum computers. *Nature*. 2010 Mar 4;464(7285):45-53.
4. Jacques V, Neumann P, Beck J, Markham M, Twitchen D, Meijer J, Kaiser F, Balasubramanian G, Jelezko F, Wrachtrup J. Dynamic Polarization of Single Nuclear Spins by Optical Pumping of Nitrogen-Vacancy Color Centers in Diamond at Room Temperature. *Physical Review Letters*. 2009 Feb 6;102(5).
5. Balasubramanian G, Chan IY, Kolesov R, Al-Hmoud M, Tisler J, Shin C, Kim C, Wojcik A, Hemmer PR, Krueger A, Hanke T, Leitenstorfer A, Bratschitsch R, Jelezko F, Wrachtrup J. Nanoscale imaging magnetometry with diamond spins under ambient conditions. *Nature*. 2008 Oct 2;455(7213):648