

VIATCHESLAV V. DOBROVITSKI

Group Leader, QuTech Institute, Technical University of Delft, the Netherlands

Education: Ph.D. Moscow State University, 1997; M.S. Moscow State University, Moscow, Russia, 1994.

Professional experience: 2016-present: Group Leader, QuTech Institute, Technical University of Delft, the Netherlands; 1999-2016: Scientist, Staff member, Ames Laboratory of the US DOE; 1997-1999: Visiting Scientist, Ames Laboratory of the US DOE; 1997: Junior Scientist, General Physics Institute of Russian Academy of Sciences.

Research interests:

Non-equilibrium quantum dynamics and quantum control of solid-state spins; Large-scale numerical modeling of quantum many-spin systems; Quantum technologies for sensing, advanced spectroscopy, and metrology; Quantum information processing with spin qubits in solids and spin-photon systems; Quantum spin materials.

Selected Publications:

1. H. F. Fotso, A. E. Feiguin, D. D. Awschalom, and V. V. Dobrovitski, “Suppressing Spectral Diffusion of Emitted Photons with Optical Pulses”, [Phys. Rev. Lett. **116**, 033603 \(2016\)](#).
2. V. V. Mkhitarian, F. Jelezko, and V. V. Dobrovitski, “Highly selective detection of individual nuclear spins with rotary echo on an electron spin probe”, [Scientific Reports **5**, 15402 \(2015\)](#).
3. V. V. Dobrovitski, G. D. Fuchs, A. L. Falk, C. Santori, and D. D. Awschalom, “Quantum control over single spins in diamond”, [Ann. Reviews Cond. Matter Phys. **4**, 23 \(2013\)](#).
4. T. van der Sar, Z. H. Wang, M. S. Blok, H. Bernien, T. H. Taminiau, D. Toyli, D. A. Lidar, D. D. Awschalom, R. Hanson, and V. V. Dobrovitski, “Decoherence-protected quantum gates for a hybrid solid-state spin register”, [Nature **484**, 82 \(2012\)](#).
5. G. de Lange, Z. H. Wang, D. Riste, V. V. Dobrovitski, and R. Hanson, “Universal dynamical decoupling of a single solid-state spin from a spin bath”, [Science **330**, 60 \(2010\)](#).
6. W. Zhang, N. Konstantinidis, K. A. Al-Hassanieh, and V. V. Dobrovitski, “Modelling decoherence in quantum spin systems” (topical review), [J. Phys.: Cond. Matter **19**, 083202 \(2007\)](#).

Synergistic activities

Proposal reviewer: US Department of Energy, US National Institute of Health, US National Science Foundation, Agence Nationale de la Recherche (France), Research Grants Council (Hong Kong), German Research Foundation (DFG, Germany)

Consultant: Microsoft Station Q

Conference organization: Session Chair MRS Spring Meeting 2014, Session Chair at several APS March meetings and MMM Conferences, Program Committee of the Conference on Magnetism and Magnetic Materials (MMM) 2008.

Journal referee: Nature, Nature Physics, Nature Nanotechnology, Nature Communications, npj Quantum materials, Physical Review Letters, Physical Review, New Journal of Physics, Europhysics Letters, Journal of Physics, Journal of Applied Physics, European Physical Journal, Journal of Modern Optics, etc.