

# Darrell Schroeter

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## Professional Experience

Professor, Reed College, 2018–present  
Associate Professor, Reed College, 2010–2018.  
Assistant Professor, Reed College, 2007–2010.  
Assistant Professor, Occidental College, 2005–2007.  
Visiting Assistant Professor, Reed College, 2003–2005.  
Visiting Assistant Professor, Swarthmore College, 2002–2003.  
Teaching Assistant, Stanford University, 1997–1999.  
Teaching Assistant, Cornell University, 1995–1996.

## Education

Ph.D. Physics, Stanford University, 1996–2002.  
Cornell University, 1995–1996.  
B.A. Physics, Reed College, 1991–1995.

## Awards & Fellowships

Kavli Institute for Theoretical Physics Scholar, 2011–2013.  
Anacapa Scholar, 2011.  
Paul Kirkpatrick Teaching Award, Stanford University, 2000.  
National Science Foundation Graduate Research Fellowship, 1996–2000.  
Lloyd P. Smith Teaching Award, Cornell University, 1996.  
Department of Energy Teaching Fellowship, 1996.  
Apker Award Finalist, 1996.  
Phi Beta Kappa, 1995.

## Books

- [1] David J. Griffiths and Darrell F. Schroeter. *Introduction to Quantum Mechanics*, 3e. Cambridge University Press, 2018.

## External Grants

Exact diagonalization of pseudo-spin Hamiltonian describing spontaneous current order. XSEDE startup allocation, 2017–2018.

Quantum Number Fractionalization in an Exactly-Solvable Model for the Chiral Spin Liquid. Cottrell College Scholars Award, \$38,398. 2007–2010.

## Publications

- [1] Martin Greiter, Darrell F. Schroeter, and Ronny Thomale. Parent Hamiltonian for the non-Abelian chiral spin liquid. *Physical Review B* 89, 165125 (2014).
- [2] David J. Griffiths, Thomas C. Proctor, and Darrell F. Schroeter. Abraham-Lorentz versus Landau-Lifshitz. *American Journal of Physics* 78, 391 (2010).
- [3] D. L. Eggleston and Darrell F. Schroeter. Solution of Laplace's Equation for the Confining End Potentials of a Coaxial Malmberg-Penning Trap. *American Journal of Physics* 78, 287 (2010).
- [4] Ronny Thomale, Eliot Kapit, Darrell F. Schroeter, and Martin Greiter. Parent Hamiltonian for the chiral spin liquid. *Physical Review B* 80, 104406 (2009).
- [5] Darrell F. Schroeter, Eliot Kapit, Ronny Thomale, and Martin Greiter. Spin Hamiltonian for which the Chiral Spin Liquid is the Exact Ground State. *Physical Review Letters* 99, 097202 (2007).
- [6] Prashant Luitel, Darrell F. Schroeter, and John W. Powell. Self-electroporation as a Model for Fusion Pore Formation. *Journal of Biomolecular Structure & Dynamics* 24, 495 (2007).
- [7] Eliot Kapit, Prashant Luitel, and Darrell F. Schroeter. Spin Hamiltonian for the quantum Hall state in a ladder geometry. *Physical Review B* 73, 075310 (2006).
- [8] Darrell F. Schroeter and Sebastian Doniach. Orbital antiferromagnetism in coupled planar systems. *Physical Review B* 69, 094407 (2004).
- [9] Darrell F. Schroeter. Revisiting Laughlin's Hamiltonian for the chiral spin liquid. *Annals of Physics* 310, 155 (2004).
- [10] Darrell F. Schroeter and Sebastian Doniach. Three-dimensional flux states as a model for the pseudogap phase of transition metal oxides. *Physical Review B* 66, 075120 (2002).
- [11] Y. Z. Chen, A. Szabó, Darrell F. Schroeter, John W. Powell, and S. A. Lee, and E. W. Prohofsky. Effect of drug-binding-induced deformation on the vibrational spectrum of a DNA-daunomycin complex. *Physical Review E* 55, 7414 (1997).
- [12] Darrell F. Schroeter, David J. Griffiths, and Peter C. Sercel. Defect-assisted relaxation in quantum dots at low temperature. *Physical Review B* 54, 1486 (1996).