

Jeremiah A. Heilman

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Case Western Reserve University
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EDUCATION

Case Western Reserve University, Cleveland, Ohio, 2001-present
Ph.D. candidate, advanced to candidacy May 2003, expected graduation May 2007
M.S. in Physics, concentration in condensed matter physics

University of Notre Dame, South Bend, Indiana, 1997-2001
B.S. in Physics, Cum Laude, June 2001

HONORS AND AWARDS

GAANN Fellow 2001, 2002, 2004
Dean's Excellence in Teaching Award, Case Western Reserve University, 2001

RESEARCH EXPERIENCE

Department of Physics, Case Western Reserve University, Cleveland, Ohio
Graduate Research Assistant, MR Research Group 2006 – present
Developing methods for parallel transmission and excitation in MRI for increased image resolution and compatibility with high B-field systems. Advisor: Mark Griswold, Ph.D.

Department of Physics, Case Western Reserve University, Cleveland, Ohio
Graduate Research Assistant, Quantum Computing group 2001-2005
Contributed to prototype implementation of an Analog Quantum Computer based on electrons on liquid helium. Advisor: Arnold Dahm, Ph.D.

Department of Physics, University of Notre Dame, South Bend, Indiana
Undergraduate Researcher, Weak Interactions group 2000-2001
Collected data for high-energy excitations in ^{32}S for studies in laboratory neutrino experiments. Advisor: Alejandro Garcia, Ph.D.

RESEARCH INTERESTS

Parallel transmission in MR (transmit SENSE), parallel acquisition in MR, high B-field issues in MR

PUBLICATIONS

Arnold J. Dahm, J.A. Heilman, I. Karakurt, T.J. Peshek. "Quantum Computing with electrons on helium." *Physica E* 18 (2003) 169-172.

ACTIVITIES

Graduate Student Senate, Senator, Case Western Reserve University, 2005-present

Notre Dame Club of Cleveland, Webmaster, 2003-present

Saint John the Evangelist Cathedral Choir, Member, Cleveland, Ohio, 2003-present

PROFESSIONAL AFFILIATIONS

American Physical Society (APS)

International Society for Magnetic Resonance in Medicine (ISMRM)

Barbership Harmony Society, (SPEBSQSA)