# Marvin A. Schofield

## Education:

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| University of Wisconsin – Milwaukee | Ph.D. | 1994-1999 | Physics (Microscopy) |
| University of Wisconsin – Milwaukee | M.S. | 1991-1994 | Physics (Cosmology) |
| University of Wisconsin – Milwaukee | B.S. | 1987-1991 | Math and Physics |

## Research and Professional Experience:

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| 2004- | Associate Scientist, Brookhaven National Laboratory. |
| 2002-2004 | Assistant Scientist, Brookhaven National Laboratory. |
| 2000-2002 | Research Associate, Brookhaven National Laboratory. |
| 1994-1999 | Research Assistant, University of Wisconsin – Milwaukee. |
| 1990-1994 | Teaching Assistant, University of Wisconsin – Milwaukee. |

## Professional Activities:

Conferences (past 5 years):

- 10th Joint MMM/Intermag Conference, Baltimore, MD, 2007.
- Microscopy Society of America, Annual Meeting, 2003-2006.
- 2nd European Workshop on Electron Holography, Dresden, Germany, 2004.

Invited Talks:

- 10th Joint MMM/Intermag Conference, "*Electron holography and atomic resolution spectroscopy of correlated electron systems*", Baltimore, MD, January 7–11, 2007.
- University of Bologna, "*Quantitative Electron Holography of Electrostatic and Magnetic Nanostructures*", Bologna, Italy, September 6, 2004.
- University of Alberta – Edmonton, "*Electron Holography of Grain-Boundary Potentials in High-Tc Superconductors*", Edmonton, Canada, September 19, 2003
- University of Wisconsin – Milwaukee. "*Electron Holography of Grain-Boundary Potentials in High-Tc Superconductors*", Milwaukee, WI, April 25, 2003.
- Microscopy Society of America, 59th Annual Meeting, "*Measuring Interface Potential of $Bi_2Sr_2CaCu_2O_8$ (001) Twist Boundaries by Off-Axis Electron Holography*", Long Beach, CA, Aug. 6-9, 2001.

## Honors and Awards:

- University of Wisconsin Dissertator Fellowship, 1998-99.
- Microscopy Society of America Presidential Scholar, 1996.

## Selected Publications:

- M. A. Schofield, M. Beleggia, and Y. Zhu, "*Characterization of JEOL 2100F Lorentz-TEM for low-magnification electron holography and magnetic imaging*", Ultramicroscopy, in press.
- M. Beleggia, M. A. Schofield, Y. Zhu, et al., "*Quantitative domain wall width measurement with coherent electrons*", J. Magn. Magn. Mater., **310**(2007)2696.
- J. W. Lau, M. A. Schofield, and Y. Zhu, "*A straightforward specimen holder modification for remnant magnetic-field measurement in TEM*", Ultramicroscopy, **107**(2007)396.
- M. A. Schofield, M. Beleggia, Y. Zhu, K. Guth and C. Jooss, "*Direct evidence for negative grain boundary potential in Ca-doped and undoped $YBa_2Cu_3O_{7-x}$*", Phys. Rev. Lett., **92**(2004)195502.
- M. A. Schofield and Y. Zhu, "*Fast phase unwrapping algorithm for interferometric applications*", Opt. Lett., **28**(2003)1194.
- M. A. Schofield, L. Wu and Y. Zhu, "*Quantitative measurement of grain boundary potentials on the nanoscale by off-axis electron holography*", Phys. Rev. B, **67**(2003)224512.