

Anna Maria Spagnuolo

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EDUCATION

Ph.D. in Applied Mathematics at Purdue University Aug 1998
West Lafayette, IN

Thesis Title: Approximation of contaminant transport through porous media by mixed finite elements and a modified method of characteristics with adjusted advection.

Thesis Advisor: Professor Jim Douglas, Jr.

M.A. in Mathematics at Oakland University June 1993
Rochester, MI

B.S. in Mathematics at Oakland University June 1991
Rochester, MI

RESEARCH INTERESTS

Modeling of physical phenomena, particularly fluid flow in porous media and disease processes, and numerical methods for approximating their solution.

PROFESSIONAL EXPERIENCE

● **Associate Professor at Oakland University** Aug 2004 – present
Rochester, MI

● **Assistant Professor at Oakland University** Aug 2000 – Aug 2004
Rochester, MI

● **Visiting Assistant Professor at Texas A&M University** Aug 1998 – Aug 2000
College Station, TX
Worked in the Department of Mathematics and the Institute for Scientific Computation.

● **Purdue Research Foundation Fellow** Jan 1996 – Aug 1998
West Lafayette, IN

● **Summer Intern at Exxon Production Research Co** May 1997 – Aug 1997
Houston, TX

Research on multiphase flows and transport in porous media.

- **Teaching Assistant at Purdue University** Aug 1993 – Dec 1996
West Lafayette, IN
Instructor for several undergraduate courses.
- **Teaching Associate at Oakland University** Sept 1991 – Apr 1993
Rochester, MI

RESEARCH GRANTS

- National Science Foundation Grant for "Collaborative Research: Hurricane Storm Surge Modeling on Petascale Computers," PI at Oakland University, with main collaborative PI: Clint Dawson at University of Texas at Austin and PI: Joannes Westerink at University of Notre Dame, \approx \$330,679 (OU portion)
- National Science Foundation Grant, SGER (10/1/2006 - 9/30/2007) co-PI with Darrin M Hanna for "Numerical Speedup Using Flowpaths" \$63,000.
- Oakland University Research Committee Award (Indirect Cost Recovery), "Real-Time Simulations Using Numerical Analysis and Flowpaths" July 2006 - July 2007, \$16,955.
- LVAD, Technology, Inc. \$1,500 for Collaborative Project on Device Improvement.
- Oakland University Research Fellowship, May - August 2001, \$7,500.
- Purdue University Research Foundation Grant (January 1996 - August 1998).

OTHER GRANTS

- J. T. Oden Faculty Fellowship Research Program for "Collaborative Research: Hurricane Storm Surge Modeling on Petascale Computers" \approx \$3,000 for a visit to Clint Dawson at UT Austin on April 24 - May 10, 2008.
- Senior Personnel on the National Science Foundation Grant for the Conference: Modeling, Analysis and Simulation of Multiscale Nonlinear Systems, PI: Malgorzata Peszynska, co-PIs: Ralph Showalter and Son-Young Yi, co-Senior Personnel: Seth Oppenheimer, Alex Panchenko, Noel Walkington, for organizing the conference on June 25-29, 2007 at Oregon State University, \$27,634.
- J. T. Oden Faculty Fellowship Research Program for "Speedup of Numerical Algorithms Using Flowpaths" \approx \$3,000 for a visit to Clint Dawson at UT Austin on May 18 - June 10, 2007.
- Accelelogic Academic Nonprofit Grant \$1,500 for attending the short course, "Algorithm Design in the Era of Reconfigurable Computing" which was held at the Holiday Inn Dayton/Fairborn, Ohio, July 12 - 14, 2006.
- Travel grant from the Oakland University Research Committee to visit the NIH and the NSF 1/31/2006 - 2/1/2006.
- Travel grant from the National Science Foundation \$450.00 to attend the NSF-CBMS conference on "Mathematical and Numerical Treatment of Fluid Flow and Transport in Porous Media" at the University of Nevada at Las Vegas in May 2006.

AWARDS

- Oakland University Excellence in Scholarship Award, April 2006.
- Award for speaking at the 25th Annual Meeting of the Brazilian Computational and Applied Mathematics Society, September 16-19, 2002 in Nova Friburgo, Rio de Janeiro, Brazil.
- Excellence in Teaching Award (1996-1997) at Purdue University.

PUBLICATIONS - REFEREED

1. *Speedup using flowpaths for a finite difference solution of a 3D parabolic PDE*, Darrin Hanna, Anna M. Spagnuolo, and Michael DuChene, Parallel and Distributed Processing Symposium 2007. IPDPS 2007. IEEE International Volume, Issue 26–30 March 2007. Pages 1–6.
2. *Reiterated homogenization and the double-porosity model*, Peter Shi, Anna Spagnuolo, and Steve Wright, Transport in Porous Media, Vol. 59, 2005, pp. 73–95.
3. *Numerical simulations of vehicle platform stabilization*, William A. Lindsey, Anna M. Spagnuolo, Curt J. Chipman, and Meir Shillor, Mathematical and Computer Modelling, Volume 41, 2005, 1389–1402.
4. *Derivation of a multiple-porosity model of single-phase flow through a fractured porous medium via recursive homogenization*, Anna Maria Spagnuolo and Steve Wright, in Asymptotic Analysis 39, Vol. 2, 2004, pp. 92–112.
5. *Modeling HIV-1 dynamics and the effects of decreasing activated infected T-cell count by filtration*, Anna M. Spagnuolo, Darrin Hanna, William Lindsey, and Gabrielle A. Stryker, Engineering in Medicine and Biology Society, 2004, IEMBS '04. 26th Annual International Conference of the IEEE, Vol. 1, pp. 722–725, September 1–5, 2004.
6. *Analysis of a multiple-porosity model of single-phase flow through a fractured porous medium via recursive homogenization*, Anna Maria Spagnuolo and Steve Wright, Journal of Applied Mathematics, Volume 2003, No. 7, 2003, pp. 327 – 364.
7. *Difficulties and uncertainty in mathematical/numerical modeling of fluid flow in fractured media*, Richard E. Ewing and Anna M. Spagnuolo, Fracture and In-situ Stress Characterization of Hydrocarbon Reservoirs, 209, Geological Society of London, London, England, 2003, pp. 187–200.
8. *Degenerate two-phase incompressible flow V: characteristic finite element methods*, with Zhangxin Chen, Richard E. Ewing, Echo Q. Jiang, and Anna M. Spagnuolo, Journal of Numerical Mathematics, Vol. 1, No. 2, 2002, pp. 1–19.
9. *Error analysis for characteristics-based methods for degenerate parabolic problems*, Zhangxin Chen, Richard E. Ewing, Echo Q. Jiang, and Anna M. Spagnuolo, SIAM J on Numerical Analysis, Vol. 40, No. 4, 2002, pp. 1491–1515.
10. *Parameter estimates for high-level nuclear waste in fractured porous media*, Jim Douglas, Jr. and Anna M. Spagnuolo, Contemporary Mathematics, Vol. 295, 2002, pp. 173–183.

11. *The approximation of nuclear contaminant transport in porous media*, Jim Douglas, Jr., Chieh-Sen Huang, and Anna M. Spagnuolo, *Computational and Applied Mathematics* Vol. 21, No. 2, 2002, pp. 409–428.
12. *The transport of nuclear contamination in fractured porous media*, Jim Douglas, Jr. and Anna M. Spagnuolo, *Journal of the Korean Mathematical Society*, Vol. 38, No. 4, 2001, pp. 723–761.
13. *Implementation of a locally conservative Eulerian-Lagrangian method applied to nuclear contaminant transport*, Chieh-Sen Huang and Anna M. Spagnuolo, “Numerical Treatment of Multiphase Flows in Porous media, State of the Art,” *Lecture Notes in Physics*, Vol. 552, 2000, pp. 179–189, Z. Chen, R. Ewing, and Z.-C. Shi, eds., Springer-Verlag, Heidelberg.
14. *A multiple-porosity model for a single-phase flow through naturally-fractured porous media*, Jim Douglas, Jr., Mauricio Kischinhevsky, Paulo Jorge Paes-Leme, and Anna M. Spagnuolo, *Computational and Applied Mathematics*, Vol. 17, 1998, pp. 19–48.

SUBMITTED WORK AND WORK IN PROGRESS

1. *Multidimensional, locally-conservative Eulerian-Lagrangian finite element methods for semilinear parabolic equations*, with Jim Douglas, Jr, submitted.
2. *The convergence of a multidimensional, locally conservative, Eulerian-Lagrangian finite element method for a semilinear parabolic equation*, with Jim Douglas, Jr. and Son-Young Yi, in preparation.
3. *A mathematical model for chagas disease with controlled spraying* with Gabrielle Stryker and Meir Shillor, in preparation. This includes an Oakland University web site for running the code under various parameter changes, in progress.
4. *Analysis of the steady states of a model for chagas disease*, with Mary Clauson, Albert Harrison, Laura Shuman, and Meir Shillor, in preparation.
5. *Harmonic extension of solutions to cell problems on perforated domains*, with Peter Shi, submitted.
6. *A model for Vibrio cholerae colonization of the human intestine*, with Victor J. DiRita, Denise Kirschner, in progress.
7. *A mathematical model and simulation results for inflation and deflation of a plate on a fixed boundary* with Meir Shillor and Bob Smith, in preparation.
8. *A model for a single phase fluid flow in a horizontally fractured reticulated structure using homogenization* with Daniel Coffield.
9. *Computational speedup of numerical procedures using field programmable gate arrays* with Daniel Coffield, Michael DuChene, in preparation.
10. *Speedup results of numerical algorithms using field programmable gate arrays* with Daniel Coffield, Michael DuChene, Ethan Kubatko, and Clint Dawson, in preparation.

PROCEEDINGS

1. *A numerical method for the simulation of nuclear contaminant transport in porous media*. Fourth Forum on Numerics and Modeling for Partial Differential Equations.

SIAM Great Lakes Section, NUMPDES 2001, Oakland University, Rochester, MI.

PROFESSIONAL ACTIVITIES

- Co-advisor (with Meir Shillor) for the Research Experience for Undergraduates (REU) at Oakland University in the Department of Mathematics & Statistics. PI: Jack Nachman, Title of Program at OU is CaNSaM (Computational and Numerical Statistics and Mathematics). Students co-advising: Mary Clauson, Albert Harrison, and Laura Shuman.
- Advisor to Michael DuChene (Ph.D. student) on a Michigan Space Grant Consortium research seed grant \$5,000.
- Represented the Department of Mathematics and Statistics at Oakland University by presenting techniques and the solution to solving the Rubik's cube at the 2005 Science, Math, and Technology Expo at Ford Field in Detroit, MI in the fall of 2005.
- Represented the Department of Mathematics and Statistics at Oakland University by presenting techniques and the solution to solving the Rubik's cube at the 2004 Science, Math, and Technology Expo at Chrysler Arena in Ann Arbor, MI in the fall of 2004.
- Advisor to an undergraduate student at Oakland University on an industrial problem involving springs and suspension systems.
- Faculty advisor to a team of four undergraduate students at Texas A& M University for work on a NASA Reduced Gravity Student Flight Opportunities/March 2000 Flight Competition.
- Advisor to two advanced undergraduate students at Texas A& M University on projects that involve mathematics and computer science.

TALKS

- Presented "How to Choose a Research Area, Advisor, Problem, Job" on March 29, 2008 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented "Post-Graduate Experiences" on March 28, 2008 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented "A Mathematical Model for *Vibrio Cholerae* Colonization of the Human Intestine" at the Center for the Study of Complex Systems at the University of Michigan, Ann Arbor, MI on November 15, 2007. [invited]
- Presented "A Model for *Vibrio Cholerae* Colonization of the Human Intestine" at the Conference "Modeling, Analysis, and Simulation of Multiscale Nonlinear Systems," at Oregon State University on June 25 - June 29, 2007. [invited]
- Presented "My Experiences in Computing Solutions to Mathematical Models in Science and Industry" at the Women in Computing Day at Oakland University on June 13, 2007. [invited]

- Presented “A Model for *Vibrio Cholerae* Colonization of the Human Intestine” as an invited Plenary Speaker at the Spring 2007 MAA Conference in Dearborn, Michigan on May 5, 2007.[invited]
- Presented (with Dr. Darrin M Hanna) “Speedup Using Flowpaths for a Finite Difference Solution of a 3D Parabolic PDE” at the NGS (Next Generation Software) Workshop at the IPDPS Conference in Long Beach, California on March 27, 2007.[invited]
- Presented “How to Choose a Research Area, Advisor, Problem, Job” on March 26, 2007 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented “Post-Graduate Experiences” on March 25, 2007 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented (with Dr. Gabrielle Stryker) “A Model for Chagas Disease with Controlled Spraying” to the Mathematics Department at Andrews University on December 8, 2006 [invited].
- Presented “Reiterated Homogenization and the Double-Porosity Model” to the Applied and Computational Mathematics Seminar in the Department of Mathematics at Oregon State University on October 20, 2006. [invited]
- Presented “A Model for *Vibrio Cholerae* Colonization of the Human Intestine” to the Department of Mathematics at Oregon State University on October 20, 2006. [invited]
- Presented “Numerical Simulations in Science” at Wright Patterson Air Force Base on July 21, 2006. [invited]
- Presented “A Career in Simulation Studies in Science and Industry” for the Biomedical and Health Informatics and REU program at Oakland University on June 20, 2006. [invited]
- Presented “Simulation Studies in Science and Industry” for the REU program in Engineering at Oakland University, Women in Computing Day on June 14, 2006. [invited]
- Presented “How to Choose a Research Area, Advisor, Problem, Job” on March 25, 2006 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented “Post-Graduate Experiences” on March 24, 2006 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented “Modeling Chagas’ Disease” to the Oakland University Biology Research Forum Group BIO 451/551 on March 14, 2006. [invited]
- Presented “How to Choose a Research Area, Advisor, Problem, Job” in March 2005 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented “Post-Graduate Experiences” in March 2005 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]

- Presented “Mathematical models of physical phenomena in science, engineering, and medicine,” in the Department of Mathematics and Computer Science Colloquium at Albion College on October 20, 2005.[invited]
- Presented “Spatial Dynamics of Cholera Infection in a Human Host” at the Oakland University Honor’s College “New and Emerging Infectious Disease” on March 4, 2005. [invited]
- Presented “Quantifying Low Concentrations of Antigen in Real-Time using Mathematical Modeling and AI,” with Darrin M. Hanna at the Karmanos Cancer Institute, November 9, 2004, Detroit, MI.[invited]
- Presented “Modeling HIV-1 Dynamics and the Effects of Decreasing Activated T-cell Count by Filtration” at the 26th Annual International Conference, IEEE Engineering in Medicine and Biology Society [EMBS], on September 4, 2004 in San Francisco, CA
- Presented “Spatial Dynamics of Cholera Infection in a Human Host” at the Society for Mathematical Biology Annual Meeting on July 26, 2004 at the University of Michigan. [invited]
- Presented “How to Choose a Research Area, Advisor, Problem, Job” in March 2004 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented “Post-Graduate Experiences” in March 2004 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented “A Preliminary Study of the Colonization of *Vibrio cholerae* in a Human Host” on March 8, 2004 to the Sigma Xi Research Society at Oakland University. [invited]
- Presented “A Preliminary Study of *Vibrio cholerae* colonization in a human host” to the Department of Mathematics and Statistics at Oakland University in November 2004. [invited]
- Presented “How to Choose a Research Area, Advisor, Problem, Job” on March 29, 2003 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented “Post-Graduate Experiences” on March 28, 2003 at the Department of Mathematics, Purdue University, West Lafayette, Indiana. [invited]
- Presented “Tracking Nuclear Waste in Porous Media,” at the School of Engineering at Oakland University in April 2003. [invited]
- Presented “A Locally Conservative Eulerian-Lagrangian Method for Approximating Nuclear Decay Chains in Porous Media ” at the Numerical Analysis Seminar at Purdue University, in November 2002. [invited]
- Presented “Cholera: A Preliminary Study”, in Rio de Janeiro, Brazil September 2002. [invited]

- Presented “A locally-conservative Eulerian-Lagrangian Method for approximating nuclear decay chains in porous media” at Wayne State University (joint Applied Mathematics and Analysis Seminar) in April 2002. [invited]
- Gave three talks at Exploration 2002 at Seaholm High School in Birmingham, MI. [invited]
- Presented “A dual-porosity model for high-level nuclear contaminant transport in naturally-fractured porous media and an approximation to the flow by a locally-conservative Eulerian-Lagrangian method” in the Oakland University Department of Mathematics and Statistics Colloquium in November 2001.
- Presented “Simulating the Transport of Nuclear Decay Chains in Naturally- fractured Porous Media” at Andrews University, Mathematics Colloquium Series on September 21, 2001. [invited]
- Presented “The Simulation of Nuclear Contaminants in Fractured Porous Media” at the SIAM-AMS-IMS Meeting at Mount Holyoke College in MA on June 20, 2001. [invited]
- Presented “ A numerical method for the simulation of the transport of nuclear contamination in fractured porous media ” at the Sixth SIAM Conference on Mathematical and Computational Issues in the Geosciences in a minisymposium on June 11, 2001. [invited]
- Presented “A model for the transport of nuclear contaminants in fractured porous media” at the Sixth SIAM Conference on Mathematical and Computational Issues in the Geosciences in a minisymposium on June 12, 2001. [invited]
- Presented “The simulation of nuclear contaminant transport in porous media” to the University of Michigan Medical School Mathematics/Biology on April 23, 2001. [invited]
- Presented “The simulation of nuclear contaminant transport in porous media ” at Wayne State University on April 3, 2001. [invited]
- Presented “Approximation of Nuclear Contaminant Transport in Porous Media” at SIAM Numerical PDEs Conference at Oakland University on March 31, 2001. [contributed paper]
- Presented “A Numerical Method for the Simulation of Nuclear Contaminant Transport in Porous Media” at Physics Department Colloquium at Oakland University on March 29, 2001. [invited]
- Presented “Approximation of Nuclear Contaminant Transport in Porous Media” to the College of William and Mary in February 2000. [invited]
- Presented “Approximation of Nuclear Contaminant Transport in Porous Media” to Pennsylvania State, Erie in March 2000. [invited]
- Presented “Approximation of Nuclear Contaminant Transport in Porous Media” to Wright State University in February, 2000. [invited]

- Fifth SIAM Conference on Mathematical and Computational Issues in the Geosciences at the Adam's Mark San Antonio - Riverwalk Hotel in San Antonio Texas, March 1999. Presented "Approximation of Contaminant Transport in Porous Media by a Modified Method of Characteristics with Adjusted Advection." [contributed paper]
- Presented "Approximation of Contaminant Transport in Porous Media by a Modified Method of Characteristics with Adjusted Advection" at the State University of New York at Stony Brook in Applied Mathematics Seminar, April 1998. [invited]
- Presented Talk on Fractures in Porous Media and Oil Recovery at Exxon Production Research Company in Houston, Texas, March 1998. [invited]
- AMS Meeting at Wayne State University in Detroit, Michigan, May 1997. Presented "A multiple-porosity model for a single-phase flow through naturally-fractured porous media." [invited]

SPECIAL SESSIONS

- Co-organizer for the special session "Biological Applications of Dynamical Systems" for the Central Section Meeting of the AMS in Ann Arbor, MI from March 1-3, 2002.
- Co-organizer for the special session "PDE Models in Biology and Epidemiology" joint AMS and MAA national meeting in New Orleans, January 2001.
- Judge for undergraduate mathematics poster competition at the joint AMS and MAA national meeting in New Orleans, January 2001.

SPECIAL WORKSHOPS and CONFERENCES

- Attended "Building PetaScale Applications and Software Environments on TeraGrid" on December 11-12, 2007 at Arizona State University, in Tempe, Arizona. Sponsored by the NSF.
- Attended "Modeling, Analysis, and Simulation of Multiscale Nonlinear Systems," at Oregon State University on June 25 - June 29, 2007. I was one of the co-organizer of the conference. Malgorzata Peszynska (PI) the conference was funded by the NSF and the DOE.
- Attended the short course, "Algorithm Design in the Era of Reconfigurable Computing" at the Holiday Inn Dayton/Fairborn in Ohio from July 12-14, 2006. I received a Accelogic ANG (Academic Nonprofit Grant) award which waived the \$1,500 registration fee.
- Invited participant of the workshop on "Numerical Methods in the Geosciences," at the IMA on March 13 - 15, 2002 organized by Mac Hyman and Mary Wheeler (Doug Arnold, director).
- Attended the conference on "Current and Future Trends in Numerical PDE's: Where is the field, and where is it going?" in Honor of Jim Douglas, Jr.'s 75th Birthday, February 8 - 10, 2002, University of Texas at Austin.

- Invited participant in the workshop “Confinement and Remediation of Environmental Hazards” in “Reactive Flow and Transport Phenomena” at the Institute for Mathematics and its Applications at the University of Minnesota in January 2000.
- Attended the local meeting of the AMS in October 1999 at the University of Texas in Austin.

OTHER CONFERENCES

- Attended “The Michigan MAA Spring Meeting 2007” in Dearborn, Michigan on May 4–5, 2007.
- Attended the SIAM Great Lakes Section 2007 Spring Meeting, “Numerical PDEs: Modeling, Algorithms and Applications” at Meadowbrook Hall at Oakland University.
- Attended “A Scientific Celebration of the 60th Birthday of Professor Richard E. Ewing” on November 17-18, 2006 at Texas A& M University.
- Attended the conference “Mathematical and Numerical Treatment of Fluid Flow and Transport in Porous Media” at the University of Nevada in Las Vegas, Nevada on May 22–26, 2006 (received NSF support).
- Attended “50 Years of ADI” at Rice University in Houston, TX on November 3–5, 2005 in honor of Douglas, Peaceman, and Rachford.
- Attended and spoke at the Society for Mathematical Biology Annual Meeting on July 26, 2004 at the University of Michigan, Ann Arbor, MI.
- Attended the International Multiconference on Computer Science and Engineering at the Monte Carlo Hotel in Las Vegas, NV, June 20-24, 2004.
- Attended and spoke at the 26th Annual International Conference, IEEE Engineering in Medicine and Biology Society [EMBS], on September 4, 2004 in San Francisco, CA
- Attended the Fourth Annual 2002 Michigan Undergraduate Mathematics Conference at Calvin College in Grand Rapids, MI on February 10, 2002. My student (then an undergraduate), William Lindsey, presented a talk on our research results.
- Attended the 2002 Meeting of the Minds at Oakland University. My student (then an undergraduate), William Lindsey, gave a presentation on our research results.

POSITIONS HELD AND MEMBERSHIPS

- Campus Champions Faculty Member from Oakland University for the TeraGrid Project.
- Member of the Proteases and Cancer group in the Karmanos Cancer Center.
- Member of the Center for Biomedical Research at Oakland University.
- Member of SIAM, AMS, MAA.
- Member of Sigma Xi Professional Society.

- Graduate Student Representative in the Department of Mathematics at Purdue University (1996-1997).

JOURNALS REFEREED

- Advances in Water Resources
- International Journal of Mathematics and Mathematical Sciences
- Computational and Applied Mathematics
- Progress in Nuclear Energy
- Journal of Biological Dynamics
- SIAM Journal on Mathematical Analysis
- Mathematical and Computer Modelling
- Special Proceedings of the International Journal of Numerical Analysis and Modelling, for the conference "Modeling, Analysis, and Simulation of Multiscale Nonlinear Systems" at Oregon State University on June 25-27, 2007.

GRANT PROPOSALS REVIEWED

- Natural Sciences and Engineering, Research Council of Canada

PH.D. COMMITTEES

- Kevin Deng, *Chairman: Professor Edward Y.L. Gu*, graduated in WI 2004.
- Mazen Alsliety, *Chair: Professor Dan Aloi*, graduated WI 2007.
- Nithin Chandrababu, *Chair: Professor Cheok*.
- Mohammad S. Sharawi, *Chair: Professor Dan Aloi*, graduated WI 2006.
- David Martin, *Chair: Professor Imad H. Elhajj*
- Dan Wu, *Chair: Professor Chris J. Kobus*
- Bo Ye, *Chair: Professor Michael Polis*
- Brooks A. Gross, *Chair: Professor Darrin M. Hanna*, graduated in WI 2008.
- Zhongying (John) Shi, *Chair: Professor Xia Wang*.
- Sreedhar Chanda, *Chair: Professor Xia Wang*.

MASTER DEGREE STUDENTS

- William Lindsey (graduated)
- Qi Lu (graduated)
- Tom Schultz (graduated)
- David VanSickle (engineering, Summer 2008)

Ph.D. DEGREE STUDENTS

- Daniel Coffield (Mathematics)
- Michael DuChene (Engineering)