

Ross Ingram

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Citizenship: U.S.

Education

PhD Mathematics, University of Pittsburgh (2011, projected)

- 3.95 GPA / 4.00 (current)

MS Mathematics, College of Charleston (2005)

- 4.00 GPA / 4.00

BS Mathematics, The Pennsylvania State University (2002)

- 3.91 GPA / 4.00 (high distinction)
- Schreyer Honors College, Honors in Mathematics

Publications and Technical Reports

- Ingram, R., Wheeler, M.F., Yotov, I. "A Multipoint Mixed Finite Element Method on Hexahedra," University of Pittsburgh, Department of Mathematics, <http://www.mathematics.pitt.edu/research/technical-reports.php>, Jul. 2009, (submitted for publication to SINUM, Jul. 2009).
- Ingram, R. "A Mixed Finite Element Approximation of Stokes-Brinkman and NS-Brinkman Equation for Non-Darcian Flows," University of Pittsburgh, Department of Mathematics, <http://www.mathematics.pitt.edu/research/technical-reports.php>, Jul. 2009, (submitted for publication to SINUM, Jul. 2009).
- Ingram, R.N., Layton, W.J., Mays, N. "Analysis of the Iterated Tikhonov Method for Ill-Posed Problems," University of Pittsburgh, Department of Mathematics, <http://www.mathematics.pitt.edu/research/technical-reports.php>, Aug. 2008, (submitted to ETNA for publication, Mar. 2009).
- Ingram, R.N., Tutwiler, R.L., "An Application in Hyperspectral Image Processing," Applied Research Laboratory, Technical Report, Apr. 2002.
- Ingram, R.N., Lewis, A.S., Tutwiler, R.L., "An automatic nonlinear correlation approach for processing of hyperspectral images," *International Journal of Remote Sensing*, Vol. 25, Number 22, 2004, 4981-4998(18).

Presentations and Workshop

- Ingram, R.N. "Uncoupling Stability and Accuracy in Tikhonov Regularization Parameter Selection," ICAM Mini-Conference, Virginia Tech University, February 21, 2009.
- Ingram, R.N. "Sensitivity Relation in an Iterated Tikhonov Regularization Scheme," Varga Conference, Kent State University, October 18, 2008.
- Brain Imaging Workshop, Mathematical Biosciences Institute at the Ohio State University, Jun. 9-13, 2008.

Military Experience

June 2002 – June 2006

Lieutenant, United States Navy

Nuclear Power School, Naval Nuclear Power Training Command (Charleston, SC)

- Instructor: taught technically advanced courses in *reactor dynamics* and *nuclear physics*
- Class Director: led daily affairs of 100 junior officers; direct manager of 6 officer advisers
- Command Duty Officer: supervised watch-team for 3000-person command
- Officer Adviser: advised 30 Naval officers in their daily military and academic affairs

Work Experience

October 2007 – present

Research Assistant, University of Pittsburgh (Pittsburgh, PA)

- Supervisors: William Layton, Mike Sussman, Ivan Yotov

April 2009 – July 2009

Mathematician, Bechtel-Bettis Atomic Power Laboratory (Pittsburgh, PA)

August 2006 – April 2009

Teaching Assistant, University of Pittsburgh (Pittsburgh, PA)

- Calculus – Fall 2006, Fall 2007, Fall 2008, Spring 2008, Spring 2009
- Scientific Computing (Graduate) – Fall 2008
- Abstract Algebra – Fall 2006

May 2000 – May 2002

Honors Research Assistant, Applied Research Laboratory (University Park, PA)

- Supervisor: Richard Tutwiler

Honors, Awards, and Achievements

- Andrew Mellon Predoctoral Fellow (University of Pittsburgh, 2009-10)
- Bechtel-Bettis Atomic Laboratory Summer Intern (Pittsburgh, PA, 2009)
- Officer Instructor of the Quarter (Naval Nuclear Power School, 2005)
 - Awarded by Commanding Officer, Naval Nuclear Power Training Command
 - Teaching innovations, major curriculum reconstruction
- Master Training Specialist (United States Navy, 2004)
 - Awarded by Commanding Officer, Naval Education and Training
 - Sustained teaching excellence
- H. Freeman Stecker Award (Penn State, 2002) – academic achievement
- Presidential Scholar Award (Penn State, 1999) – academic achievement

Computer Languages

- Proficient in C, FORTRAN, FreeFem++, MATLAB, MAPLE
- Knowledge of C++, Mathematica, PETSc

References

- William Layton, Professor and Graduate Director (University of Pittsburgh, wjl@pitt.edu)
- Mike Sussman, Adjunct Professor (University of Pittsburgh , sussmanm@math.pitt.edu)
- Catalin Trenchea, Assistant Professor (University of Pittsburgh, trenchea@pitt.edu)
- Ivan Yotov, Professor and Chair (University of Pittsburgh, yotov@math.pitt.edu)