Matthew W. Nabity

CONTACT
INFORMATION

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ACADEMIC
EXPERIENCE

Western Oregon University, Monmouth, OR USA
Mathematics Department
Visiting Assistant Professor   September 2011 - Present

University of Colorado, Denver, Colorado USA
Department of Mathematical & **Statistical Sciences**
Lynn Bateman Doctoral Fellowship   September 2010 - May 2011
NSF GK-12 Fellowship   July 2008 - July 2010
− Science Fellow, July 2009 - July 2010
   Served as a content expert in middle school science classes and helped direct a summer research experience for middle school science teachers as part of the NSF Rocky Mountain Middle School Math and Science Partnership.
− Mathematics Fellow, July 2008 - July 2009
   Served as a content expert in middle school math classes and helped teach History of Math as part of continuing education for middle school teachers offered by the NSF Rocky Mountain Middle School Math and Science Partnership.
Graduate Teaching Assistant   September 2006 - May 2008
− Courses Taught: College Algebra, College Trigonometry

University of Tennessee, Knoxville, Tennessee USA
Innovative Computing Laboratory, Department of Computer Science
Graduate Research Scientist   Summer 2008

Front Range Community College, Longmont, CO USA
Mathematics Department
Adjunct Instructor   January 2004 - May 2006
− Courses Taught: Survey of Algebra, Finite Math, College Algebra, Survey of Calculus, Calculus II, Differential Equations, Linear Algebra.

University of Colorado, Boulder, Colorado USA
Department of Applied Mathematics
Graduate Traineeship - NSF VIGRE Fellowship   January 2003 - December 2003
− Independent research in computational fluid dynamics and reactive gas dynamics.
Graduate Part Time Instructor   January 2002 - December 2002
− Courses Taught: Differential Equations Computer Lab.
Graduate Teaching Assistant   August 2000 - December 2001
− Recitation Courses Taught: Differential Equations & Linear Algebra, Calculus III.

EDUCATION

University of Colorado, Denver, Colorado USA

Ph.D., Applied Mathematics, expected May 2011
− Advisor: Julien Langou

University of Colorado, Boulder, Colorado USA

M.S., Applied Mathematics, May 2003

University of Nebraska, Lincoln, Nebraska USA

B.S., Mathematics *cum laude*, May 2000

B.S., Secondary Education *cum laude*, May 2000,
- Specialization Area: Mathematics Level 6 (grades 7 - 12 all schools)
- Nebraska Teaching Certificate

AWARDS, GRANTS & HONORS	National Science Foundation GK-12 Fellowship, UCD	2008 - 2010
	SIAM student travel award for SIAM-LA09,	2009
	Lynn Bateman Outstanding Graduate Teaching Award, UCD	2008
	Master Teacher Award (Nominee), Front Range Community College	2006
	Master Teacher Award (Runner up), Front Range Community College	2004
	National Science Foundation VIGRE Fellowship, UCB	2003
	Certificate of Excellence for Outstanding Teaching, UCB	2002

PUBLICATIONS

J. Langou and M.W. Nabity, *Algorithmic Variants for Cholesky QR*, manuscript pending.

D.R. Kassoy, J.A. Keuhn, M.W. Nabity, J.F. Clarke, *Detonation Initiation on the Microsecond Time Scale: DDTs*, Combustion Theory and Modeling, Volume 12, Issue 6 December 2008, pages 1009 - 1047.

D.R. Kassoy, J.A. Keuhn, M.W. Nabity, J.F. Clarke, *Detonation Initiation and Evolution in Spray-Fueled Pulsed Detonation Rocket Engines*, Final Report Defense Technical Information Center, National Technical Information Service, 2006.

D.R. Kassoy, J.A. Keuhn, M.W. Nabity, J.F. Clarke, *Detonation Initiation on the Microsecond Time Scale: DDTs*, Proceedings of the 44th AIAA Aerospace Sciences Meeting and Exhibit, 2006.

D.R. Kassoy, M.W. Nabity, *Detonation Initiation on the Microsecond Time Scale: DDT's*, Proceedings of the 58th Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, 2005.

D.R. Kassoy, J.A. Keuhn, M.W. Nabity, J.F. CLarke, *Modeling Detonation Initiation on the Microsecond Time Scale*, Proceedings of the 43rd AIAA Aerospace Sciences Meeting and Exhibit, 2005.

PRESENTATIONS

Nabity, M. W. (2012, June 4). *Multicore and the Nonsymmetric Eigenvalue Problem.* Ninth International Workshop on Accurate Solution of Eigenvalue Problems. Napa, CA.

Nabity, M. W. (2010, September 13). *An Introduction to Nonsymmetric Jacobi-Davidson.* Presentation for the Center for Computational Mathematics Colloquium University of Colorado. Denver, CO.

Nabity, M. W. (2009, October 28). *Cholesky and the QR factorization.* Presentation for the SIAM Conference on Applied Linear Algebra, Monterey Bay. Seaside, CA.

Nabity, M. W. (2009, May 14). *Look ahead technique for reduction to Hessenberg form: design of the algorithm and applicability on current hardware.* Presentation for Scheduling for large-scale systems, University of Tennessee Knoxville. Knoxville, TN.

Nabity, M. W. (2009, March 14). *On the use of pivoted Cholesky in the Cholesky QR Algorithm.* Presentation for the Fifth Annual Front Range Applied Mathematics Student Conference, UC Denver. Denver, CO.

SERVICE & MEMBERSHIPS

Co-advisor, Math Club, Mathematics Department, Western Oregon University, Fall 2011 - Present
Reviewer, Para 2010: State of the Art in Scientific and Parallel Computing Conference Proceedings
Lecturer, Math On My Mind, UCD Department of Mathematical & Statistical Sciences Outreach Program, 2010 - Present
President, Student Chapter SIAM, University of Colorado Denver, 2008 - 2010
SIAM Member, 2006 -Present