

## Joan Remski

Associate Provost for Faculty Development and Digital Learning  
The University of Michigan-Dearborn  
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Professor of Mathematics  
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### EDUCATION

1997	Ph.D., Applied Mathematics	Michigan State University
1990	B.S., Mathematics	University of Michigan-Dearborn

### EMPLOYMENT HISTORY

January 2024 – present	Associate Provost	University of Michigan-Dearborn
July 2019 – December 2023	Chair	Department of Math & Stats
September 2017 – present	Professor	University of Michigan-Dearborn
September 2003 – August 2017	Associate Professor	University of Michigan-Dearborn
September 1997 – August 2003	Assistant Professor	University of Michigan-Dearborn

### HONORS AND AWARDS

2014, Distinguished Service Award, University of Michigan-Dearborn  
2013, Faculty Greeter, Winter Commencement, University of Michigan-Dearborn  
2002, Senior Varsity Athlete Faculty Award, The University of Michigan-Dearborn  
1997, Rackham Summer Research Grant, Rackham Graduate School, The University of Michigan

### ACADEMIC INTERESTS

Numerical methods for partial differential equations including moving mesh methods and their application to materials science. Indicators of success and support systems for students pursuing undergraduate degrees in STEM.

### GRANTS RECEIVED

[1] *Retaining Students in STEM on a Commuter Campus with Efficient High Impact Practices*, PI. Co-PIs: Marilee Benore and Daniel Lawson. National Science Foundation, Award number 1230058, \$1,420,310. 2021-2028.

### SELECTED PUBLICATIONS

[1] J. Remski, "Mesh Spacing Estimates and Efficiency Considerations for Moving Mesh Systems," *Numerical Mathematics: Theory, Methods and Applications*, vol. 9, issue 03, 2016. pp. 432-450.

- [2] J. Remski, J. Zhang, and Q. Du, "On Balanced Moving Mesh Methods," *Journal of Computational and Applied Mathematics*, vol 265, *Current Trends and Progresses in Scientific Computation*, August, 2014. pp. 255-263.
- [3] D. James, M. Lachance, and J. Remski. "Singular Vectors Subtle Secrets," *College Math Journal*, vol. 42, no. 2, 2011. pp. 86-95.
- [4] J. Clifford, D. James, M. Lachance, and J. Remski, "A Constructive Approach to the Singular Value Decomposition and Symmetric Schur Factorization," *The American Mathematical Monthly*, vol. 112, no. 4, 2005, pp. 353-363.
- [5] Q. Du and J. Remski. "Limiting Models for Josephson Junctions and Superconducting Weak Links," *Journal of Mathematical Analysis and Applications*, vol. 266, 2002, pp. 357-382.

#### TEACHING EXPERIENCE AND CURRICULUM DEVELOPMENT

Co-organized/developed Calculus in Inquiry Based Learning Format (2017-2020)

Developed Computing Environments for Math Majors, a python programming class (2013)

Developed Partial Differential Equations (2001)

Taught: Calculus I, II, III, Differential Equations, Linear Algebra, Computing with Mathematica, Dynamical Systems, Mathematical Modeling, Fourier Series and Boundary Value Problems, Introduction to Wavelets, Numerical Analysis, Matrix Computations, Linear Algebra with Applications, Partial Differential Equations.

#### GRADUATE/UNDERGRADUATE STUDENT SUPERVISION

Masters Projects: Kevin Liddy (2021), Nathan Ortiz (2018), Samantha Yassine (2017), Michael Rozak (2016), Norman Klowender (2016), Barbara Bodzin (2011), Nadine Ayoub (2011), Michael Meade (2009), Ghada Saad (2007), Mobashar Ahmad (2007), Kirk Lenigan (2004)

Undergraduate Projects: Marianne DeBrito, Annaliese Keiser, and Taima Younes (2018), Brock Rowberry (2017), Spencer Bryngelson (2013), Andrew Hagen (2011), Jon Smereka (2009)

#### SELECTED UNIVERSITY SERVICE ACTIVITIES

Faculty Senate Council (Vice Chair) (2013)

Senate Promotion and Tenure Committee (Chair in 2013) (2013-2015)

Faculty Senate (2010-2013)

Campus Grants Committee (Chair in 2004) (2002-2008)

CASL Executive Committee (2016-2019)

M.S. in ACM Program (Director) (2006-2011 and 2015-2019)

Department Executive Committee (2016-2019, 2007-2012, 2001-2003, 1998-2000)

#### SELECTED PROFESSIONAL SERVICE ACTIVITIES

Secretary, SIAM Great Lakes Section (2015-2019)

Organizing Committee Member, SIAM Great Lakes Spring Meeting (2016)

Co-Organizer, SIAM Great Lakes Spring Meeting on Mathematical Biology (2010)