JOHN URSCHEL

CONTACT INFORMATION

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Massachusetts Institute of Technology
Cambridge, MA 02139 USA
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CURRENT APPOINTMENTS

Doctoral Candidate *2016 - Present*
Department of Applied Mathematics,
Massachusetts Institute of Technology

Adjunct Research Associate *2014 - Present*
Department of Mathematics,
Penn State University

American Football Player *2014 - Present*
Baltimore Ravens,
National Football League

EDUCATION

M.A. in Mathematics *2013*
Penn State University
Thesis: Topics in Applied Mathematics

B.S. in Mathematics *2012*
Penn State University
Minor in Statistics
GPA: 4.0

PRIOR WORK EXPERIENCE

Instructor *2013*
Department of Mathematics,
Penn State University

American Football Player *2009 - 2013*
Penn State Nittany Lions,
National Collegiate Athletic Association

AWARDS AND HONORS

Academic
MIT Dean of Science Fellow, 2016-2018
Student Marshall for Mathematics Graduation Ceremony, 2012
Kermit Anderson Award in Mathematics, 2012
Evan Johnson Memorial Scholarship in Mathematics, 2011

Athletic
Sullivan Award, 2014
Campbell Trophy, 2013
Associated Press All-American, 2013
CoSIDA Academic All-American, 2012, 2013
All-Big Ten, 2012, 2013

PUBLICATIONS

John C. Urschel, Ludmil T. Zikatanov. On the Maximal Error of Spectral Approximation of Graph Bisection, to appear in Linear and Multilinear Algebra

John C. Urschel, Xiaozhe Hu, Jinchao Xu, Ludmil Zikatanov. A Cascadic Multigrid Algorithm for Computing the Fiedler Vector of Graph Laplacians, Journal of Computational Mathematics, Vol. 33 No. 2, 2015, 209-226

John C. Urschel, Ludmil T. Zikatanov. Spectral Bisection of Graphs and Connectedness, Linear Algebra and its Applications, Volume 449, 15 May 2014, Pages 1-16

John C. Urschel. A Space-Time Multigrid Method for the Numerical Valuation of Barrier Options, Communications in Mathematical Finance, vol. 2, no. 3, 2013, 1-20

John C. Urschel, Joseph R. Galante. Instabilities in the Sun-Jupiter-Asteroid Three Body Problem, Celestial Mechanics and Dynamical Astronomy, March 2013, Volume 115, Issue 3, pp 233-259

TEACHING

Math 232: Integral Vector Calculus, Penn State University *Fall 2013*
Role: Lecturer
SRTE: Course 6.14/7; Instructor 6.71/7

Math 041: Trigonometry and Analytic Geometry, Penn State University *Spring 2013*
Role: Lecturer
SRTE: Course 6.06/7; Instructor 6.59/7

Econ 490: Introduction to Econometrics, Penn State University *Spring 2012*
Role: Teacher's Assistant