

Pacific Coast Undergraduate Mathematics Conference 2014

Career Panelists

Daniel Lichtblau, Wolfram Research

Daniel Lichtblau was an undergraduate physics major at Harvard and received a PhD in mathematics from the University of Illinois in the area of Several Complex Variables (although nowadays he can only name two of them-- z and w , in case anyone wants to know). He spent approximately 5 years working on software (compilers and related) between college and grad school. He started working at Wolfram Research in August 1991, and has been there ever since, with one year as a visitor in the UIUC Math Dept. At Wolfram Research the bulk of his work has involved the implementation of mathematical and related capabilities within *Mathematica*. He has also worked to some extent on *Wolfram|Alpha* and other projects. His job makes more use of basic linear algebra than he would have thought possible, let alone reasonable.

Carol Meyers, Lawrence Livermore Labs

Michelle Carol Meyers is a mathematician at Lawrence Livermore National Laboratory, working in the areas of counterterrorism, energy grid planning, and nuclear enterprise modeling. Her expertise is in the areas of integer and linear programming optimization, decision theory, artificial intelligence, and risk analysis. She has worked primarily in the application areas of energy grid planning, counterterrorism, and nuclear enterprise modeling - diverse areas that reflect the breadth of her interests. She is the primary architect of the Stockpile Transformation Optimization Requirements Model (STORM), which is currently used to evaluate potential courses of action for stockpile planning in the Department of Energy. Recently she led an effort to port the PLEXOS power market modeling software to run on high-performance computers, in conjunction with industrial partners. In addition she is currently involved in a risk analysis effort in the counterterrorism arena. She holds a BA in math from Pomona College and a Ph.D. in Operations Research from the Massachusetts Institute of Technology. In college she attended the Carleton College Summer Math Program for Women, the Budapest Semesters in Mathematics Program, and interned for two summers at the National Security Agency, which influenced her eventual career choice. Carol especially enjoys when she can use theoretical results to best inform how to tackle an applied problem.

Megan Negrey, Quality Control Analyst at SmithGeiger

Megan Negrey graduated on May 2012 from California Lutheran University with a BS in mathematics and minor in computer science. She is working at a market research firm in Westlake Village doing quality control. She had an internship at Sandia National Laboratories also doing quality control and a few summers ago she did research at CLU for the Swenson Research Fellowship.

Nick Rodgers, National Security Agency

Nick Rogers grew up in Illinois, and attended college at Stanford University, graduating with a major in mathematics. He then pursued a Ph.D. in number theory at Harvard University, graduating in 2004 under the direction of Noam Elkies. He taught at the University of Arizona and the University of Rochester, and then moved to Washington, DC, to begin work as an applied research mathematician at the National Security Agency. His current job combines research in theoretical and applied mathematics, statistics and informatics, and high-performance computing.

Amy Szczepanski, Art of Problem Solving

Amy Szczepanski is a curriculum developer at Art of Problem Solving (AoPS) in Alpine, CA. She spends much of her time figuring out various aspects of how to provide top-quality online math education to gifted middle school and high school students. She earned her Ph.D. in mathematics from the University of California, San Diego in 2001; her research was in non-commutative ring theory. Her undergraduate degree, also in mathematics, is from Dartmouth College in Hanover, NH. She has also completed coursework in computer science, statistics, management science, microbiology, and graphic design at the University of Tennessee. Prior to joining AoPS, she has taught math at a handful of universities, worked with a scientific visualization group at a high performance computing center, and helped run a math and science summer program for high school students. Outside of work, she collaborates with Evan Meaney on projects that explore non-traditional applications of computational tools to new media projects.