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MATH NEWS

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Are You Interested in Becoming a Mathematics Major?

Major selection is still a few months away, but it is not too early to start researching which major is right for you. The Mathematics Department offers three majors (Applied Mathematics, “Pure” Mathematics, and Operations Research), and the Quantitative Economics Major is offered jointly by the Mathematics and Economics Departments. With a large, diverse faculty, we offer a wide variety of courses which may appeal to you. During select evenings in November, the STEM (Science, Technology, Engineering and Mathematics) departments are offering briefs to the plebes regarding the majors these departments offer. The schedule of the remaining briefs is below:

Date	Engineering	Math and Science
Wed 9 Nov	1st Batt	4th Batt
Mon 14 Nov	5th Batt	6th Batt
Mon 16 Nov	2nd Batt	1st Batt
Mon 21 Nov	4th Batt	3rd Batt

If you missed your brief, or still have questions about becoming a Math Major, be sure to attend our Math Major open house, which will be held in February. Or, you can speak with your math instructor!

Mathematics Faculty Profile

Dr. David Phillips was born in Gallup, NM and, after a year, moved to Manchester, CT where he was raised. After graduating from high school, he attended Oberlin College in Oberlin, OH, where he graduated in 1997 with a B.A. in mathematics. He worked for three years as a consultant in Washington, DC at The Lewin Group and PA Consulting, where he was the lead programmer on several projects in the fields of energy policy and health care and human services. Intrigued by computational and algorithmic questions, he moved to New York City to become a graduate student in the department of Industrial Engineering and Operations Research at Columbia University, where he earned his Ph.D. in Operations Research in 2007. After defending his dissertation in August of 2006, he began a tenure-track faculty position as an Assistant Professor in the department of mathematics at the College of William and Mary. Dr. Phillips spent 2007–2008 as a visiting assistant professor at Columbia University, and fall of 2010 as a visiting scholar at Brown University in the department of computer science. While at William and Mary, Dr. Phillips advised two honor’s students and is currently co-advising a third. In his spare time, Dr. Phillips enjoys running, chess, bridge, scrabble, and cooking. Dr. Phillips is married to Dr. Anja Soldan Phillips, a research professor at Johns Hopkins University, and has a seven-year-old daughter, Sophia. He and his family live in Annapolis.

Dr. Phillips’ research focuses on the intersection of combinatorial and convex optimization, and he is an author of ten refereed publications. In much of his work, Dr. Phillips develops algorithms for optimization problems known as semidefinite programs. Semidefinite programs have applications in a wide variety of fields, including statistics, graph optimization problems, finance, and chemistry. Dr. Phillips has also used techniques from scheduling, graph optimization, and linear programming to develop decision analysis tools used in the fields of defense and health care. Currently, Dr. Phillips is working on several projects including developing algorithms for semidefinite programs that arise in Sparse Principal Component Analysis and mathematical optimization models for Tuberculosis.