

Archived Colloquia

2015/16

Monday, 3/14/16, @ 11:00am in PB 192

Speaker: Dr. Nahid Walji, Ph.D.

Title: 3×3 *matrices and the Ramanujan conjecture.*

Abstract: We will consider sequences of 3×3 matrices which are extracted from certain special functions in number theory. We will explain what the Ramanujan conjecture predicts about the size of the elements of these matrices and the extent of what is currently known. Then we shall demonstrate a technique to show that infinitely many matrices in each sequence satisfy an approximation to the Ramanujan conjecture. No background is needed other than an understanding of matrices and complex numbers.

Friday, 3/11/16, @ 2:00pm in PB 138

Speaker: Dr. Marat Markin, Ph.D.

Title: *On the Smoothness of Weak Solutions of an Abstract Evolution Equation with a Scalar Type Spectral Operator*

Abstract: Click [here](#).

Wednesday, 3/9/16, @ 11:00am in PB 194

Speaker: Dr. Michael Bishop, Ph.D.

Title: *Spectral Gaps in a Family of Quantum Spin Systems*

Abstract: Click [here](#).

Friday, 3/4/2016 @ 02:00pm in PB 138

Speaker: Dr. Lynn Scow, Ph.D.

Title: *Ramsey Theory: The Mathematician's Art of Decluttering and Organizing*

Abstract: Click [here](#).

Thursday, 2/18/2016 @ 11:00am in PB 390

Speaker: Dr. Ben Nolting, Ph.D. (Case Western Reserve University)

Title: *Balls, cups, and quasi-potentials: A new mathematical framework for understanding ecosystem stability*

Abstract: Click [here](#).

Tuesday, 2/16/16, @ 11:00am in PB 290

Speaker: Dr. Christina Hamlet, Ph.D.

Title: *Mathematical and Computational Modeling of a Swimming Lamprey with Sensory Feedback*

Abstract: Click [here](#).

Friday, 2/12/2016 @ 1:30pm in PB 192

Speaker: Dr. Jonathan Adler (Promontory Growth and Innovation), Ph.D.

Title: *On finding good math jobs in industry*

Abstract: Click [here](#).

Thursday, 2/11/2016 @ 11am in PB 390

Speaker: Minchul Kang, Ph.D. (St. Thomas University)

Title: *Mathematical modeling of fluorescence microscopy and its applications to cancer systems biology*

Abstract: Click [here](#).

November 6, 2015 @ 1pm in PB 192

Speaker: Peter Tannenbaum, Ph.D. (Fresno State Professor Emeritus)

Title: *The Mathematics of Dating, Courtship and Marriage*

Abstract: When it comes to dating, courtship and marriage, most people assume that these are "matters of the heart" and that mathematics cannot play a role at all. Surprisingly, there are several questions related to "matters of the heart" where mathematics does play a useful and interesting role. How do you narrow the search space? How do you optimize your chances of finding the "best" (or "second best", or "acceptable") partner? How can you create "stable marriages"?

In this talk I will describe some of the ways mathematics is used in dealing with these questions. I will not be proving any theorems or dealing with any deep theories but rather describing some ideas and an occasional algorithm. The talk will be accessible to anyone with a mathematics background beyond high school algebra.

If you are looking for love this talk will probably not help you, but if you want to spend a fun hour hearing about math in some of the most unexpected places, you are cordially invited.

Click [here](#) to see the flyer.