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# A f t e r m a t h

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## Graduate Colloquium

### What is the Graduate Colloquium?

by **Nessy Tania**

The Graduate Colloquium is a weekly seminar organized by the Graduate Student Advisory Committee in our department. Graduate students, post-docs, and faculty members participate weekly in the seminar as speakers and as audience members.

Topics presented in the seminar vary widely as talks are solicited from all areas of research being pursued in our department. Despite the variation however, most talks are fairly accessible to a general audience. Past talks have featured a juggling performance (Dan Margalit who spoke on Braids, Fall 2004), and the Peter Travers (of the Rolling Stone) “must see platelets aggregation movie of the year” (Bob Guy on Non-Newtonian fluids and blood clotting, Fall 2003). A list of talks for the current and past semesters can be found on the GSAC Colloquium website: <http://www.math.utah.edu/gsac/colloq.html>

The aim of the colloquium is to aid beginning graduate students in finding an area of specialization and also to give all graduate students exposure to different areas of mathematics. Graduate students are encouraged to give a talk on either their current research or on other topics they find interesting. Beginning graduate students are particularly urged to consider presenting in the Graduate Colloquium since it serves as a friendly training ground for students giving talks, a skill that needs to be developed for our future careers.

Everyone is welcome to attend the colloquium. Treats, also known as GSNAC's, are provided before each seminar. If you have never attended the colloquium before, check it out sometime. Head over to JWB 335 on a Tuesday afternoon at 4:30 p.m. Bring your own cup, have some snacks and hear a fun and enlightening talk.

Finally, the organizing committee is always eagerly looking for speakers.

### Speaking at the Graduate Colloquium by **Yoshihiro Iwao**

Tuesday, October 21st, I talked in the Graduate Colloquium for the first time. The topic was “group structure on elliptic curves,” but actually, it was titled “additive abelian groups.” This is because I didn't give Josh (who is in charge of scheduling) the title in advance. I just gave him the abstract. So for some students, it might not have been something they expected.

The reason I chose this topic was that I expected most of the attendance would be first year graduate students in math biology. And I'm studying algebraic geometry, so I thought it was suitable as an introductory-level example which arises in algebraic geometry.

Giving a talk in the Graduate Colloquium gives you a great opportunity to practice math talks. Besides, unlike teaching, you can expect a quick evaluation from those in attendance. They are your friends, so you feel free to ask them how your talk was. It was a great experience.

## ‘Ndahoo’ aah

by **Kelly MacArthur**



Arch and hogan. Photo courtesy of Chris Roberts.

Ndahoo'ah (pronounced en-da-HOE-ah) is a program that occurs for the month of June in Monument Valley, Utah (near the four corners) at the local high school, on the Navajo reservation. The goal of the program is to combine math/computer programming with traditional Navajo crafts.

Ndahoo'ah has been running for about 12 years, and was started by Herb Clemens and the principal at Monument Valley High School, Pat Seltzer. The students spend two hours a day with the Navajo elders learning and completing a craft and also two hours a day with the teachers we send down, learning mathematics and computer programming. Our mathematics focus is mainly geometry and problem solving. We use Logo (a user-friendly geometrical

programming language and software package) to teach the students how to create their craft design on the computer. The students range in age from 12 to 18 years old. This last summer we sent down two teachers, Chris Roberts, an undergraduate student from our department who also went down the year before with another of our undergraduates, David Seal, and Ann Lisitzky from BYU. We received funding from a private donor who is interested in seeing the program succeed, as well as a large donation from the George S. and Dolores Doré Eccles Foundation. The Eccles money was granted to us with the help of Dave Mortensen in the College of Science who asked that some of the interest money earned on the gift to build the math center be used for this project. It is basically enough money to keep Ndahoo'ah running for about 5 years! We're extremely grateful for the efforts and financial help to keep this program alive for the Navajo kids.

There is enormous need on the Navajo reservation for mathematics training. The kids are typically very weak in this area. We are attempting to bridge this gap with the Ndahoo'ah program as well as through professional development opportunities for the mathematics teachers. I am also working with Bryan Brayboy on campus who is interested in American Indian issues. We have been applying and will continue to apply for various grants to research and improve the mathematics learning on the reservations.

If you'd like to read more about the Ndahoo'ah program, you can view my website at [http://www.math.utah.edu/~macarthu/Ndahooah/Ndahooah\\_index.html](http://www.math.utah.edu/~macarthu/Ndahooah/Ndahooah_index.html).

## USAC Open House

by Chris Roberts

Mathematics undergraduates and faculty demolished the sandwich bar at the recent USAC open house held in the LCB loft September 29th. An estimated lunch bunch of 100 students and faculty enjoyed the free sandwich bar lunch and pithy con-



Students and faculty enjoy a free lunch at the USAC open house. Photo courtesy of Nobu Isono.

versation social presented by the Mathematics Undergraduate Student Advisory Committee and the Department of Mathematics.

The event was part of a coordinated plan to generate a sense of undergraduate community amongst mathematics majors and department faculty. This year's USAC has several events planned over the academic year designed to introduce math majors to each other and to the faculty. Academic community is an essential element of all premier scientific institutions and the University of Utah is not different.

For more information about upcoming events, the USAC and the undergraduate mathematics community visit the departmental web page and click on the Undergraduate heading.

## Personality!

Firas Rassoul-Agha and Alla Borisyyuk are new to our faculty this year. Firas specializes in probability theory and stochastic processes, and Alla's area of interest is mathematical biology, specifically computational neuroscience. They have a one-year-old son, Maxim, and the rest of their family is spread out over four countries: Russia, Syria, the U.K., and the U.S.



Alla and Firas both like to read, dance (particularly swing dance), rollerblade, hike, explore ethnic restaurants, and travel. Firas also likes to boulder (a type of rock climbing), play squash and soccer, and follow tennis grand slam events.

When asked to tell us something about themselves that would surprise us, they were willing to let us in on a little secret – that they're Martians! But it is a secret, so try to keep that bit of information just in the math department, OK?

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Editors: Angie Gardiner and Andrejs Treibergs