

Math for America Utah Hosts Teachers' Workshop

By Amanda Cangelosi

As the season's first snow fell on the 12th of October, 60 secondary math teachers, five professors, and one cat gathered at the Alta Peruvian Lodge in Little Cottonwood Canyon to engage in the Math for America Utah Fall 2012 Workshop. In collaboration with the Center for Science and Mathematics Education, Math for America Utah trains and supports new secondary math teachers. In addition to MfA Utah fellows and mentors from across the state, workshop participants included UofU graduate students in the Masters of Science for Secondary School Teachers program. The keynote speaker was Henri Picciotto, a legendary teacher at The Urban School of San Francisco. Picciotto conducted three sessions over the two-day workshop. Sessions included extensions of classical problems from the mathematical folklore, as well as a thorough discussion of useful pedagogical practices. Memorable moments included a surprising connection between optimal soccer playing and the lemniscate, as well as a confirmation that group theory can be taught in kindergarten.

Colloquia Schedule

We have a number of exciting speakers scheduled for this semester, which anyone in the department is welcome to attend. A detailed schedule can be found on the webpage:

www.math.utah.edu/seminars/

Departmental Colloquium

Thursdays at 4:15 in JWB 335

Graduate Colloquium

Tuesdays at 4:35 in JWB 335

Undergraduate Colloquium

Wednesdays at 12:55 in LCB 225

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Image courtesy of the University of Utah

Nebraska Conference for Undergraduate Women in Math

By Morgan Cesa

At the end of January, I attended the Nebraska Conference for Undergraduate Women in Mathematics, at the University of Nebraska, Lincoln, as an invited graduate student panelist. Over 260 undergraduate students attended the conference, and many of them gave short presentations about their undergraduate research projects. I was asked to be on a panel about summer programs in math, and participated in smaller group discussions about how to choose a graduate school and life as a graduate student. It was exciting to be around so many talented young women. Several of the students that I spoke to said that they had not been previously planning to go to graduate school but the conference had changed their minds. I think the NCUWM is a great opportunity for undergraduate women to meet other students and talk about mathematics, and I would be happy to talk to any undergraduate students who are interested in attending in future years.

Faculty Distinctions



Mladen Bestvina



Paul Fife



Paul Roberts

Fellows of the American Mathematical Society

Congratulations to our colleagues Mladen Bestvina, Ken Bromberg, Paul Fife, Ken Golden, Christopher Hacon, Dragan Milicic, Paul Roberts and Hugo Rossi who were all elected as members of inaugural class of Fellows of the American Mathematical Society. Fellows are elected based on their contribution to the profession. Their responsibilities include presenting a “public face” of excellence in mathematics, and advising the President and/or the Council (of the AMS) on public matters when requested. See the website www.ams.org/profession/ams-fellows/ams-fellows for more information on the AMS Fellowship program.



Dragan Milicic



Hugo Rossi



Ken Bromberg



Christopher Hacon



Ken Golden

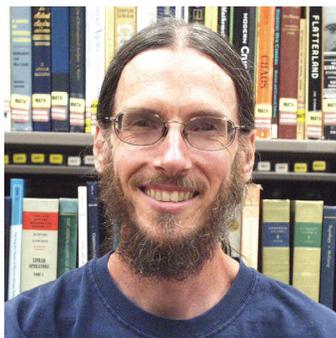
Ken Golden Gives the AMS Porter Lecture

Our colleague Ken Golden, gave the prestigious AMS Porter Lecture at the annual meeting of the AMS this January, in San Diego, on polar ice. Here is a link to a great newspaper article, in which Ken discusses sea ice, and some of his recent adventures to the Antarctic (and is referred to as a “mathematical Indiana Jones”): <http://www.utsandiego.com/news/2013/jan/11/ken-golden-mathematician-math-conference-polar-ice/>

Staff Awards

A Brief Sketch of Pieter Bowman

By Nelson Beebe



Pieter Bowman has reached 25 years of service with the University of Utah. Congratulations!

In 1979, Pieter Bowman moved from the Chicago suburbs to Salt Lake City where he became a science undergraduate student at the University of Utah. His interests quickly turned to computers, and he became a part-time computer operator for what was then known as the College of Science Computer (CLSC), a DECsystem-20 PDP-10 running the TOPS-20 operating system, and housed in the South Physics building.

Pieter’s value as a skilled computer operator, programmer, hardware troubleshooter, and network guru quickly became evident to those of us privileged to work closely with him, and the College of Science was lucky to be able to offer him full-time employment not long after he started working here.

That CLSC facility served the four departments of the College well from 1977 until its retirement on Halloween, 1990. Although CLSC was originally an independent organization reporting directly to the Dean of the College of Science, in 1986, it was moved under the auspices of the Mathematics Department. Its hardware was gradually moved to a machine room in JWB 120. When LCB renovation was completed in early 2002, all of the equipment, and the computing staff, moved to the ground floor of LCB.

During the mid 1980s, Pieter took a break from academia, and worked in industry here in the Salt Lake Valley, at Evans & Sutherland, then at Wasatch Education, and finally at Allen Communications. At each workplace, he learned new skills, and we were consequently delighted to have him return to the Mathematics Department where he has remained ever since. He is one of the University of Utah's greatest experts on Unix, operating systems, e-mail systems, and networks, and works comfortably with both hardware and software.

Pieter has many outdoor interests, including city walking, biking, hiking, cross-country skiing, snow shoeing, and snorkeling. Besides many weekend excursions in the Wasatch and Uintah mountains, his hiking activities have included several week-long trips in the southern Utah wilderness, during most of which no other humans were seen. Together with our friends and colleagues, Graeme Milton, Nat Smale, and Stefan Folias, on multiple trips, he has traversed long sections of the extremely arduous north slope/cliff/wall of the Grand Canyon.

Pieter has also traveled extensively, to the Caribbean, Mexico, Mediterranean Europe, Great Britain, 49 of the 50 US states, Australia, and soon, for the fifth time, to China, his wife's home country. On one of those trips, they reached Tibet overland.

In his 'copious free time', Pieter enjoys gardening, reading (mysteries, fantasy, and science fiction), and the music of KRCL and other public-radio stations. In his Chicago years, he played in, and toured with, his school marching band.

Undergraduate Events

REU: The Mathematics of Disease By Fred Adler

I was fortunate to lead Math 4800, an introduction to mathematical research for undergraduates, during the fall semester. One dozen enthusiastic students joined me to explore research questions linked to diseases. After exploring questions like "Why aren't we all dead?", "Why do you need three drugs to treat HIV?", and "What is the role of randomness in disease spread and persistence?" The students broke into 4.669 groups to study research problems of their own. Clusters of highly variable size organized around the following topics:

- * Predicting the spread of a bioterror agent in Utah,
- * The dynamics of malaria infection,
- * The role of vaccination in controlling shingles,
- * How a disease might spread through the math department, and
- * The link between Catalan numbers and the spread of disease.

We finished with a poster session to share the universally impressive results, and all emerged a bit wiser about teaching, learning, asking the right question, and living in the shadow of doom.

Calculus Carnival By Aryn DeJulis

The annual Calculus Carnival was held on November 6, 2012 and was coordinated by Aryn DeJulis, Moshe Adrian, and Lance Miller. Each year calculus students take over the halls of LCB and JWB for this exciting and fun opportunity of combining math, games, and prizes - with the largest incentive provided by our calculus instructors: extra credit. The students rotated through 3 different games which have been altered to include calculus concepts and problems that are accessible to all our calculus students from various levels.

The games played consisted of Math Jeopardy, Pin the Nose on Isaac Newton, and Calculus Pictionary - and the success of each game was made possible by all our fantastic volunteers who came from faculty, graduate students, and advanced undergraduate students. We had 140 students show up to participate and 4 winners were chosen from various levels of calculus, based on their performance in each game.

The Calculus Carnival is a great opportunity for our undergraduate calculus students to have some fun with calculus and get excited about our undergraduate math program.

Miscellaneous

Recycling at the U By Danielle Brown

The U has limited ability to recycle our refuse, though the Sustainability Office is always working to expand our recycling capability, currently there are limitations. We don't recycle glass. Nor do we recycle steel cans. Currently, we recycle aluminum, clean paper (including clean pasteboard cartons) and clean corrugated cardboard, along with plastics numbered 1 and 2 respectively. Plastic number three is PVC, it's a toxic material and so shouldn't go in the recycling at all. The University of Utah cannot recycle plastics that are food containers (generally numbers 5, 6, and 7), because the majority of U attendees do not or cannot wash them out before disposal. Given the volume we discard at

the U, dregs of food and drink in the recycling bins attract vermin, and so become a health hazard. These contaminants are the biggest spoiler of recycling we see here at the math department. They make it untenable for the recycling companies who purchase from us to sell it in return and so force them to treat a soiled load as regular refuse. Not only is this a waste, it's also unfair and unkind to dump such a mess on the folks who get to sort recyclables for a living. If an item holds food dregs it should be put into the garbage.

A quick guide to telling recyclables from garbage:

Plastic type numbers are generally found on the bottom of containers, set within the symbol of cycling arrows; however, at times they can also be found on lids. We can recycle plastic types 1 & 2 (e.g. milk bottles

and disposable plastic grocery bags). More complete information can be found at H2NO.org. Clean corrugated cardboard belongs in the bins marked "Cardboard." It's a valuable commodity, so please try to recycle it. Clean pasteboard (e.g. kleenex boxes, soda cartons, cereal boxes, etc) goes in the Mixed Paper bins. Any other materials not listed above should be placed in the garbage. As far as batteries are concerned, if you would like the U to properly dispose of work related small batteries please contact the Office of Environmental Health and Safety for guidelines. Their number is 801.581.6590.

And finally, for LCB the recycling bins are located at the east of of the first floor, under the stairs. JWB's are at the north end of the first floor, behind CSME and by the elevator.

Aftermath is published about every semester during the academic year.
If you have an idea or article to submit contact one of the editors:

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