

## First Annual Pikes Peak Regional Undergraduate Mathematics Research Conference

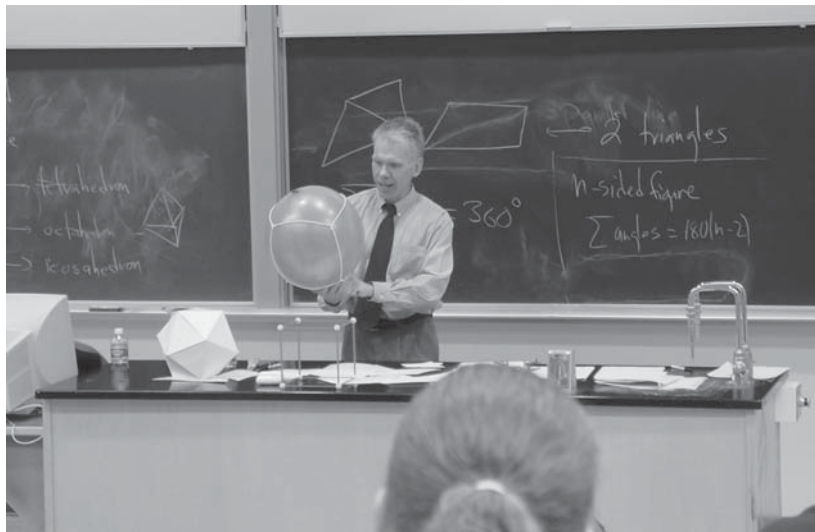
By Hortensia Soto-Johnson and Mike Brilleslyper

The First annual Pikes Peak Regional Undergraduate Mathematics Research Conference, funded by MAA NSF Grant DMS-0241090 was held on February 28, 2004 at Colorado State University-Pueblo. With the beautiful front range of the Rocky Mountains as a backdrop and 76 people in attendance from 12 different institutions, the conference was extremely successful. The one-day program included a keynote speech, 18 student research presentations, and a panel presentation on graduate school experiences in mathematics.

The conference began with a keynote address, “*Presidential Doodles and Geometric Perfections*,” by Professor Rob Tubbs of the University of Colorado. The lively, entertaining, and accessible talk made connections between regular 3-D polyhedra and 2-D graphs. As one student said, “He had a neat presentation that I understood. He kept me engaged during the entire speech.”

Two parallel sessions of student presentations ran in the morning and afternoon. There were a variety of topics, including history of mathematics, knot theory, geometry, and applied math. The breadth of the presentations was impressive, as was the backgrounds and diversity of the presenters, who came from a wide range of Colorado institutions.

The panel, called “*Planting the Graduate School Seed*,” was by far the most popular component of the conference. RaKissa Cribari (University of Northern Colorado), Trent Kull (Colorado State University), Sheila Miller (University of Colorado), and Leslie Varys (University



Ron Tubbs illustrating “*Presidential Doodles and Geometric Perfections*.”

of Colorado - Denver), all graduate students, served on the panel. They discussed why they chose to attend graduate school, their experiences so far, and how well they felt their undergraduate education had prepared them. Their personal stories provided a rare glimpse of the true rewards and struggles that go into pursuing a degree in higher mathematics. In addition, they discussed graduate school opportunities, the choice of an advisor, plans after graduate school, and other general advice for prospective mathematics graduate students. Several students commented how much they enjoyed the panel. “It was enlightening to hear from students who are actually doing what graduate students do as well as ‘tips and tricks’ to know beforehand.”

A total of 76 people attended the conference: 18 presenters, 34 student spectators, 20 faculty, and 4 graduate students. Of the 57% of participants who completed a questionnaire, 90.7% of the participants were Caucasian, 2.3% were Asian, and 7% were Hispanic. According to the completed questionnaires, 7% of the students were freshman, 18.6% were sopho-

mores, 23.3% were juniors, and 30.2% were seniors. Approximately 72% of the students were math majors. Many of the students were double majors in areas such as art, biology, business, computer science, physics, and engineering. Approximately 42% of the students were members of a math club and 23% were members of the MAA. Of the people who completed the question-

naire 47% said they planned on attending graduate school.

Overall the participants were very positive towards the organization of the conference and a majority of the students were interested in attending or presenting at future conferences. One hundred percent of the respondents felt the conference was well organized and 80% said they would be willing to present at future conferences.

The success of the first annual conference gives us confidence for continued success. Southern Colorado covers a large region of the state and contains a diverse group of colleges and universities. The participants made many suggestions for the next time around, and we plan to follow many of these suggestions for the second annual conference, which is tentatively scheduled at Colorado College in Colorado Springs. The continued support and enthusiasm of faculty and students should make the Second annual conference even more successful.

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