# 2005 Distinguished Teaching Award Call for Nominations

Each year, the section recognizes one outstanding teacher of collegiate mathematics with an award named in honor of Burton W. Jones, a life long advocate of excellence in teaching at all levels. In addition to an honorarium, a certificate and an invitation to deliver the opening lecture at the next Section Meeting, the recipient becomes the section's nominee for the Deborah and Franklin Haimo Awards for Distinguished College or University Teaching of Mathematics. These national awardees (at most three) are honored at the MAA winter meeting with a certificate and \$1000 check. All nominators also receive a certificate of recognition of their efforts to support the section mission of promoting excellence in teaching; nominators and nominees both receive free meeting registration at the next section meeting. To begin the nomination process for an outstanding teacher that you know, simply submit the one-page nomination form (available at our website) by 1 December 2004. Complete nomination materials (described on the website) are due 29 January 2005.



The section currently sponsors the following two grant programs:

**Student Recognition Grant Program** (maximum request \$250) for the purpose of recognizing superior student achievement in mathematics. Proposals must submitted no later than March 15 of the year in which the proposed recognition is to be made; funding decisions will be announced no later than the Annual Business Meeting of the Section.

**Section Activities Grants** (maximum request \$500) to assist Section members with projects in support of the Section Mission. Applications are accepted at any time; notification of funding decisions can be expected within two months of submission.

Further details on both programs is available at the section website or by contacting the section secretary janet.barnett@colostate-pueblo.edu.

# **Governor's Report**

The following are items that were reported at the Board of Governor's Meeting or the Section Officers Meeting at the Joint Meeting in Phoenix, Arizona.

- The MAA has received funding from the ExxonMobil Foundation for Project ACCCESS (Advancing Community College Careers: Education, Scholarship and Service). This is a mentoring and professional development initiative for two-year college mathematics faculty. This project, jointly developed by the MAA and AMATYC, has as its goals the development of a cadre of new two-year college mathematics faculty who are effective members of their profession. Participation Fellows will gain knowledge of the culture and mission of the two-year college and its students, acquire familiarity with the scholarship of teaching, commit to continued growth in mathematics, and participate actively in professional communities. For more information visit: http://www.maa.org/ProjectACCCESS.
- Plans are underway for the 100-year anniversary of the MAA, which will be in 2015. As part of the celebration we have been asked to send any relevant materials to *The Archives of American Mathematics* at the University of Texas at Austin. If you have any materials that represent the Rocky Mountain Section of the MAA, please send them to Janet Barnett or myself.
- 3. A SIGMAA on Quantitative Literacy has been approved. There are also discussions of a SIGMAA for High School Teachers.
- 4. The MAA has established the Annie and John Selden Prize for Research in Undergraduate Mathematics Education (RUME) to promote and recognize this research. This prize will be given every other year to a researcher who has established a significant record of published work in RUME and who has been in the field at most ten years.
- 5. If you haven't already done so, please read the new approved recommendations in the Undergraduate Programs and Courses in the Mathematical Science: CUPM Curriculum Guide 2004. The Illustrative Resources for CUPM Guide 2004 will remain an electronic document on MAA Online, and substantial revisions are planned for this semester.

Respectively Submitted,

Hortensia Soto-Johnson, Governor for the RMS of the MAA

**Section News** 

#### **Community College of Aurora**

CCA is still dealing with the budget cuts, as are other schools. Presently we are at less than 30 Regular Faculty and some of the 30 are part-time. The math department employs one full-time regular faculty member. FTE for math for fall was 382. The math department is growing, as it is in many colleges.

We are looking at alternative methods of delivery to meet the needs of the students. We are also continuing to incorporate technology into the classroom and making an effort to create a math lab.

Assessment has become an issue, therefore we are administering pre and post tests for the Developmental Ed courses and are presently looking at "projects" for assessment in Mat 121 and Mat 135.

# **Metropolitan State College of Denver**

The Department welcomes new applied mathematics faculty Dr. Lindsay Packer.

# **Red Rocks Community College**

Thanks to a grant from the US Agency for International Development (USAID), Red Rocks math instructor **Tom Niehoff** is spending Spring semester teaching at Tribuvan University in Katmandu, Nepal. In return, Red Rocks will have four Nepalese faculty visiting our campus in late January and early February.

#### South Dakota School of Mines and Technology

The South Dakota School of Mines and Technology was able to field a contestant pool of approximately ten students this year for the 64th annual Putnam Mathematical Competition held in December. Special thanks should go to the coach: **Dr. Ed Corwin**.

**Dr. Roger Johnson** was recently awarded the C. Oswald George Prize for the best article published in the journal of "Teaching Statistics <a href="http://science.ntu.ac.uk/rsscse/TS/>">http://science.ntu.ac.uk/rsscse/TS/>"</a>. The award winning article: "Record values and surviving glacial moraines" was published in the Autumn 2003 issue. This is the second time that Dr. Johnson has won this award.

# Is news from your school missing?

Send your news to your department liaison now with a request to forward it to the Newsletter Editor for inclusion in the next issue!

# 2004 Spring Meeting at Colorado College

Planning continues for an exciting 2004 Spring Section Meeting, to be held at **Colorado College** on **April 16 - 17**. This year's meeting will be held **jointly** with the **Colorado Mathematics Association of Two Year Colleges** (COLOMATYC). COLOMATYC sessions will include sessions on *Developmental Mathematics* and *Transfer Level Mathematics*, organized by **Rick Reeves** of Red Rocks Community College, as well as a COLOMATYC Business Meeting.

The meeting will officially open with an address by our most recent Burton W. Jones Distinguished Teaching Award Recipient, **Dr. Hugh King** of the Colorado School of Mines. Dr. King, MD and PhD, possesses a wealth of experience, including a decade plus practicing medicine and five years at Bell Labs. His address, *Complex Problems, Real Solutions? The Namlo Foundation*, will be a non-technical presentation of the story of the Namlo Foundation, an organization whose goal is to help people of developing countries help themselves through education and grassroots programs. This presentation will discuss the challenges of designing programs and solutions that truly benefit the people of developing countries. In an attempt to encourage students in the United States to become more aware of world issues and to give them an opportunity to use their learning to make a difference, the Foundation also works with students from elementary to university level, and some of these programs will be presented.

This year's Invited Keynote Speaker will be **Dr. Lowell Beineke**, current editor of MAA's *College Mathematics Journal*. An internationally acclaimed graph theorist, Dr. Beineke has held the Schrey Professorship of Mathematics at Indiana-Purdue University at Fort Wayne since 1986, and received the Indiana Section Award for Distinguished Teaching in 1997. Dr. Beineke's Friday Banquet Address will introduce us to Splendor in the Graphs; his Saturday Keynote Address is titled Graphs are Finally Surfacing.

**Dr. Robin Wilson** of the Open University (England) will also deliver a special featured address on Friday afternoon. Internationally recognized for his work in the history of combinatorics (as well as for his colorful clothing), Dr. Wilson can always be counted on for a lively talk. His talk *Four Colors Suffice: How the Map Problem Was Solved*, based on his recent book of the same name, promises to be a lively and captivating look at how a seemingly innocuous question baffled great minds and stimulated exciting mathematics with far-flung applications.

Preceding the program on Friday morning, Dr. Steven Janke (CC)

and **Dr. Fred Tinsley** (CC) will conduct a workshop on **Issues in Teaching Statistics**. This workshop will discuss how the mathematician's perspective helps or hinders the teaching of modern statistics. Current and prospective teachers of statistics are encouraged to attend. Registration is limited to 25 participants; the registration fee is \$5 per person.

Rounding out the scientific program will be talks contributed by **intelligent**, **involved and inspirational people like you!** Information on submission guidelines can be found in the **Second Call for Papers** and **Speaker Response Form** on **pages 7** and **8** of this newsletter.

New teachers and soon-to-be teachers who are interested in becoming involved in a network of young professors in the Rocky Mountain area should plan to attend the session on **Innovations in the Classroom** on **Saturday morning**. The session will end with a **reception** where people new to the profession and/or the region can meet and discuss their teaching ideas and experiences. This reception will also serve as an **organizational meeting** for the beginning of a **Rocky Mountain Section of Project NExT**, the New Experiences in Teaching program.

### **Other Meeting Information**

**Dr. Steven Janke** and **Dr. Marlow Anderson (Colorado College)** cordially invite department chairs to join them in an open discussion of common concerns, curricular or otherwise, at a special **Luncheon for Mathematics Department Chairs**, in the Worner Center on Friday, 11:40 – 12:50. Further information, including luncheon cost, will be mailed to chairs later this spring.

The Program Committee cordially invites all meeting participants to attend the **Friday Evening Reception** to be held at Bemis Hall Lounge on the Colorado College Campus. The **Friday Evening Banquet and Awards Ceremony** will follow the reception at the same location. Please note that banquet reservations must be received by April 12 to guarantee availability.

**MAA Publications** will again be available at special discounts (**below membership prices!**) on both Friday and Saturday, along with **Section Logo Shirts**. Remember, MAA returns 10% of all proceeds from book sales at our meeting to the section. Please note that only credit cards and checks (no cash) will be accepted for MAA book purchases, with all orders shipped at no additional charge.

# MAA Rocky Mountain Section Meeting Registration Form April 16-17, Colorado College, Colorado Springs

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| REGISTRATION INFORMATION   |                              |  |
|--|------------------------------|--|
| Last Name  | First Name                   |  |
| Institution  |                              |  |
| Address  |                              |  |
| City   | State Zip                    |  |
| E-mail address:  |                              |  |
| Phone:   | FAX:                         |  |
| MAA member? AMATYC   | Member? Other?               |  |
| AMS member? NCTM   | Member?                      |  |
| Fees:  |                              |  |
| Please makes checks payable to: Colorado College (indicate MAA on item<br>line). Return form with payment to:<br>John Watkins<br>Department of Mathematics<br>Colorado College<br>14 East Cache La Poudre<br>Colorado Springs, CO 80903-3294 |                              |  |
| * For preregistration discount, form must be rec<br>Please note that there will be a \$17.00 charge fo   | eived no later than April12; |  |

# Speaker Response Form - Due March 5, 2004

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# **Second Call for Papers**

The **deadline** for submission of abstracts for the 2004 Spring Section Meeting is **March 5**, **2004**. Proposals received from students and MAA members after this date will be scheduled on a first-come, first-scheduled, space-available basis. Proposals from non-members sponsored by MAA members must be received by the deadline.

Although talks on all topics mathematical are welcome, special sessions are being organized around the following themes:

#### Interesting Ideas in Number Theory and Geometry:

Organized by Jane Arledge (Mesa) and Rob Tubbs (CU-Boulder) In this session, we will share interesting tidbits of knowledge and explore connections in the broad areas of number theory and ge-

ometry. Talks should be addressed to general mathematics faculty.

# History of Mathematics and Its Use in Teaching

Organized by Janet Barnett (Colorado State University-Pueblo)

This session invites talks on historical topics and their use in teaching mathematics, especially in courses other than a history of mathematics course.

# Innovations in the Classroom

Organized by Josh Laison (CC) and Hortensia Soto-Johnson (CSU-Pueblo)

Presenters will share innovative ideas they have used successfully in their classes, with particular emphasis on suggestions for new teachers. This session is scheduled for Saturday morning.

# Student Papers

Organized by Travis Kowalski (Colorado College)

Are you supervising a student research project? Encourage your student to present their results at the meeting! Registration is free for all students, and student speakers receive a complimentary one-year membership in the MAA, including the journal of their choice.

The default talk length will be 20 minutes, with every effort made (within the constraints of the schedule) to accommodate requests for longer talks and other scheduling preferences. **Please submit special requests early.** 

For non-electronic submissions, please use the Speaker Response Form located on the following page. **E-mail equivalents of this form are encouraged!** Please be sure to include all requested information.

Please direct questions and suggestions about the program to Program Chair **John Watkins** at jwatkins@ColoradoCollege.edu, 719-389-6542.

# Preliminary 2004 Meeting Schedule

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| <b>Friday, April</b><br>9:00 - 11:30 | 16<br>Issues in Teaching Statistics<br>Dr. Steven Janke (CC) and Dr. Fred Tinsley (CC)   |  |
|--------------------------------------|--|--|
| 11:40 - 12:50                        | Luncheon and Open Discussion for Department Chairs,<br>Worner Center, CC Campus<br>Hosts: Dr. Steven Janke (CC) & Dr. Marlow Anderson (CC)<br>All Department Chairs in the section are encouraged to at-<br>tend; further information, including luncheon cost, will be mailed<br>to chairs in March or early April. |  |
| 12:30 - 4:00                         | Registration, Publisher Exhibits and MAA Book Sales  |  |
| 1:00 - 1:10                          | Opening Remarks and Welcome  |  |
| 1:15 - 2:00                          | Burton W. Jones Distinguished Teaching Award<br>Invited Lecture  |  |
|                                      | Complex Problems, Real Solutions? - The Namlo Foundation<br>Dr. Hugh King, Colorado School of Mines  |  |
| 2:10 - 4:20                          | Parallel Sessions - Contrib. Papers, Special Sessions, Panels  |  |
| 4:30 - 5:30                          | <b>Special Invited Address</b><br><i>Four Colors Suffice: How the Map Problem Was Solved</i><br>Dr. Robin Wilson, The Open University  |  |
| 5:45 - 6:15                          | <b>Departmental Liaison Meeting</b><br>Please forward agenda items to any section officer by April 10.   |  |
| 6:15 - 7:00                          | Reception, Bemis Hall Lounge, CC Campus  |  |
| 7:00 - 9:30                          | Banquet and Awards Ceremony, Bemis Hall, CC Campus<br>Banquet Address: Splendor in the Graphs<br>Dr. Lowell Beineke, Indiana-Purdue University Fort Wayne  |  |
| Saturday, April 17<br>MAA Book Sales |  |  |
| 8:00 - 8:50                          | MAA Rocky Mountain Section Business Meeting<br>Please forward agenda items to a section officer by April 10.   |  |
| 9:00 - 10:00                         | Saturday Keynote Address: Graphs are Finally Surfacing Dr. Lowell Beineke, Indiana-Purdue University Fort Wayne  |  |
| 10:10 – 1:00                         | <b>Parallel Sessions</b> - Contrib. Papers, Special Sessions, Panels<br>The Innovations in the Classroom session will be followed by<br>a reception and organizational meeting for Section NExT.   |  |
|                                      | Watch for regular meeting updates at<br>http://www-math.cudenver.edu/~maa-rm   |  |

# **Meeting Maps and Accommodations**

Detailed maps, including parking information, will be mailed to all section members with the Final Program in early April.

The following hotels and motels have established special rates for the conference. These rates are subject to availability, so make your reservations as soon as possible. Please make reservations directly with the hotel or motel and identify our conference: MAA Rocky Mountain Section Meeting at CC.

Antlers Adam's Mark, 4 S. Cascade Reservations: 1-866-299-4602 \$89.00 + tax (before March 15)

Econo Lodge, 714 N. Nevada Reservations: 719-636-3385 \$31.95 + tax single \$37.95 + tax double

Hearthstone Inn (B&B), 506 N. Cascade Reservations: 719-473-4413 \$88.89 total, includes full breakfast

Room at the Inn (B&B), 618 N. Nevada Reservations: 1-888-442-1896 \$85.00 total, includes full breakfast **Red Lion**, 314 W. Bijou Reservations: 1-800-477-8610 \$49.00 + tax

J's Motel, 820 N. Nevada Reservations: 1-877-472-6009 \$39.95 + tax single \$55.00 + tax double

Lennox House (B&B), 1339 N. Nevada Reservations: 1-800-471-9282 \$89 - \$109 + tax, includes full breakfast www.lennoxhouse.com

The Red Lion is downtown off I-25 at Bijou, about a 5-minute drive from campus. Also downtown, about 5 minutes away by car, is the Antlers Adam's Mark, one of Colorado Springs' great hotels. J's and the Econo Lodge are within a block or two of campus; Hearthstone, Lennox House and Room at the Inn, three lovely old Victorian B & Bs, are almost as close.

# **Nominees for Section Chair Solicited**

Nominees are now being sought for the position of 2005 - 2007 **Section Chair.** Service includes a one-year term as Chair Elect beginning April 2004, and a one-year term as Past Chair ending April 2008. The Section Chair is expected to provide leadership, serve on the Executive and Program Committees, handle correspondence between national and the section, and oversee appointments to committees. The election will be held at the 2004 Spring Section Meeting. To make a nomination, contact **Bill Briggs** wbriggs@math.cudenver.edu, 303-556-4809.

# Pike's Peak Regional Undergraduate Mathematics Conference

Funding from the MAA Undergraduate Mathematics Conferences will help support the first annual Pikes Peak Regional Undergraduate Mathematics Conference (PPRUMC). It will be held February 28, 2004 at Colorado State University-Pueblo. Students are encouraged to present research in the areas of mathematics, the history of mathematics and mathematics education. Students who do not present are strongly encouraged to attend.

Lunch will be provided for all students and faculty attending the conference. Travel funds are available for students traveling longer distances. For more information about travel funds or the conference contact: Hortensia Soto-Johnson at hortensia.soto@colostate-pueblo.edu.

Funding through the MAA NSF-RUMC (NSF Grant DMS 0241090)

# Registration Form - Submit by February 21, 2004

| Student Name  |     |
|---|-----|
| Affiliation   |     |
| Mailing Address   |     |
| E-Mail Address  |     |
| Phone Number  |     |
| Faculty Sponsor & E-Mail  |     |
| Project/Research Title  |     |
| Abstract (100 words or less)  |     |
| Schedule Preference Request   |     |
| T-Shirt Size (available if sufficient funds)  |     |
| PLEASE RETURN THIS FORM OR AN E-MAIL EQUIVALENT<br>(Note: e-mail submissions are strongly preferred)        | то: |
| Hortensia Soto-Johnson<br>Department of Mathematics<br>Colorado State University-Pueblo<br>Pueblo, CO 81001 |     |

hortensia.soto@colostate-pueblo.edu

#### **About Our Logo**

The logo for the Rocky Mountain Section of the Mathematical Association of America was created in by Mark Petersen in 2001. A graduate student in the Applied Mathematics Department at the University of Colorado at Boulder at that time, Mark says of his design:

"The mountain symbols were chosen because analysis is the foundation for all of mathematics. The equation  $e^{i\pi} + 1 = 0$  must rank among the most beautiful formulas in mathematics. It connects the five most important constants of mathematics with the three most important operations - addition, multiplication, and exponentiation. These five constants symbolize the four major branches of classical mathematics: arithmetic, represented by 0 and 1; algebra, by *i*; geometry, by  $\pi$ ; and analysis, by *e*. (Quoted from Eli Maor's *e*, *The Story of a Number*). I chose to portray this equation as a train because rail has historically been the life blood of the American West, and trains are complementary to any mountain scene."

# **Meetings Calendar**

MAA Rocky Mountain Section Meeting, Colorado College; April 16-17, 2004

NCTM National Meeting, Philadelphia; April 22-24, 2004 ICME - 10, Copenhagen, Denmark; July 4-11, 2004 MAA MathFest, Providence; August 12-14, 2004 CCTM Annual Meeting, Denver; September 23-24, 2004 AMATYC National Conference, Orlando; November 18-21, 2004

Joint Mathematics Meetings, Atlanta; January 5-8, 2005 NCTM National Meeting, Anaheim; April 6-9, 2005 MAA MathFest, Albuquerque; August 4-6, 2005

Joint Mathematics Meetings, San Antonio; January 12-15, 2006 Joint Mathematics Meetings, New Orleans; January 4-7, 2007 Joint Mathematics Meetings, San Diego; January 6-9, 2008

#### Aoccdrnig to a rscheearch ...

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