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Spring 2018 Newsletter

Section Website: http://sections.maa.org/rockymt

Spring 2018 Newsletter in PDF Format for Printing

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http://sections.maa.org/rockymt/newsletters/spring2018news.pdf

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Current term of service in parentheses; The Chair serves for 4 years – one as Chair Elect, two as Chair, one as Past Chair; All other positions are 1 year terms unless otherwise noted.

Section Executive Committee Officers for 2017 – 2018

Chair Elect (2017 - 2021)	Alexander Hulpke Colorado State University Fort Collins, CO 80523	alexander.hulpke@colostate.edu 970-491-4288
Chair (2015-2019)	Mike Jacobson University of Colorado Denver Denver, CO 80217	michael.jacobson@ucdenver.edu 303-315-1708
Vice-Chair (2016-2018)	Shawna Mahan Pikes Peak Community College	shawna.mahan@ppcc.edu 719-502-3268
Secretary/ Treasurer (2017-2020)	Spencer Bagley University of Northern Colorado Greeley, CO 80639	spencer.bagley@unco.edu 970-351-2254
MAA National Rep (2017-2020)	Heidi Keck Western State Colorado University Gunnison, CO 81231	hkeck@western.edu 970-943-3167
Program Co-Chairs	Oscar Levin Nathaniel Miller University of Northern Colorado	oscar.levin@unco.edu nathaniel.miller@unco.edu

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Other Committee Members and Representatives

Section Nominating Committee

Gulden Karakok (Chair), UNC	gulden.karakok@unco.edu
Bruce Lundberg, CSU-Pueblo	bruce.lundberg@csupueblo.edu
Kyle Riley, SDMST	kyle.riley@sdsmt.edu

Awards Selection Committee

Alexander Hulpke (Chair), CSU	alexander.hulpke@colostate.edu
Shawna Mahan, PPCC	shawna.mahan@ppcc.edu
Diane Davis, MSU Denver	ddavi102@msudenver.edu
Mary Pilgrim, CSU	mary.pilgrim@colostate.edu

Section Awards Coordinator
(2017-2020)   Jeremy Muskat, Western State Colorado University jmuskat@western.edu

Section Student Activity Coordinator
(2017-2020)   Beth Schaubroeck, USAFA   beth.schaubroeck@usafa.edu

Higher Education Representative on CCTM Governing Board
(2016-2019)   Erica Hastert, Early College of Arvada   ehastert@ecarvada.org

Section Book Sales Coordinator
(2015-2018)   Janet Heine Barnett, CSU - Pueblo   janet.barnett@csupueblo.edu

Section NExT Committee
 (2016-2019)   Rebecca Swanson, Colorado School of Mines   swanson@mines.edu
               Amanda Schaeffer-Fry, MSU Denver   aschaef6@msudenver.edu

Public Information Officer and Section Liaison Coordinator
(2017-2020)   Spencer Bagley, University of Northern Colorado   spencer.bagley@unco.edu

Website Editor
(2015-2018)   George Heine, Math and Maps   gheine@mathnmaps.com

Newsletter Editor
(2016-2019)   Linda Sundbye   sundbyel@msudenver.edu
               Metropolitan State University of Denver   303-615-0746
               Department of Mathematical and Computer Sciences
               P. O. Box 173362, Campus Box 38
               Denver, CO 80217-3362

Each year since 1992, the section recognizes one outstanding teacher of collegiate mathematics with an award named in honor of Burton W. Jones, a lifelong 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 is eligible to be 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 $100*e check. All nominators also receive a certificate of in 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: http://sections.maa.org/rockymt and in this newsletter) by **15 December 2018**. **Complete nomination materials** (described on the website) are due **15 January 2019**.

The Rocky Mountain Section of the MAA approved in 2015 a new teaching award for faculty early in their career. The award was inspired by the Henry Adler Award, which has been active at the national level since 2004. We hope to use this section program as an opportunity for recognition for faculty members that are early in their career and this program makes a wonderful companion to the section Distinguished Teaching Award. To be eligible the candidate must:

- Hold a doctorate degree

- Be college or university teachers who have held a full-time faculty appointment in a college department of mathematical sciences in the Rocky Mountain Section for at least two, but not more than seven, years since receiving the doctorate. A nominee who has just started the eighth year of teaching at the time of the application is still eligible for the award. If a nominee has held his or her doctorate for more than seven years, then the nominator must indicate on the nomination form the times that the nominee was not teaching. Common exceptions to the 7-year limit are maternity, paternity, family, or medical leaves. Sabbaticals and postdoctoral fellowships are exceptions only if they involved no teaching and the application does not include accomplishments made during these times.
- Hold membership in the Mathematical Association of America

Nominees should be recognized for excellence in teaching at the undergraduate level and have a demonstrated influence outside their own classrooms. The award includes a small cash prize and a plaque, plus the person will also be recognized at the next section meeting. This is an excellent opportunity for you to get recognition for the excellent teachers in your department and also for the mathematics community to recognize the teaching contributions people can make early in their career.

Complete nomination guidelines and the one-page nomination form are included in this newsletter. To begin the nomination process for an outstanding teacher that you know, simply submit the **one-page nomination form** (available at our website:
http://sections.maa.org/rockymt and in this newsletter) by **15 December 2018**. **Complete nomination materials** (described on the website) are due **15 January 2019**.

As winter winds down – or fizzles out (at least in Colorado, we hear quite a bit about how poor the snow was for the ski season this year), plans for the annual section meeting are heating up! I expect we will have another very exciting section meeting this year in Greeley, hosted by the University of Northern Colorado on April 13-14.

Our banquet speaker will be **Matt Boelkins** from Grand Valley State University and look forward to hearing from the section's 2017 Burton W. Jones Distinguished Teaching Award Recipient, **Diane Davis** from Metropolitan State University of Denver. In addition, plans are starting to take shape for the 2019 section meeting at Fort Lewis College in Durango on April 12-13, 2019.

Another great accolade for the section, for the second year in a row, is that one of this year's MAA Deborah and Franklin Tepper Haimo Awards was presented to the section's 2016 Burton Jones Teaching Award winner **Hortensia Soto,** "for college or university mathematics teachers who demonstrate extraordinary success in teaching effectiveness, even beyond their own institutions." There is a link, on the section web page to the Prizes and Awards book from the JMM in San Diego which has the full citation on p. 59.

Since there are no guidelines for what must go into these pieces, I like to add tidbits that maybe aren't as well known, but might be of interest to section members. So here are two items I think deserve special mention:

1) The National Math Festival
http://www.nationalmathfestival.org/
This is a biennial celebration of mathematics with the next celebration in 2019.

2) USA Science & Engineering Festival
https://usasciencefestival.org
This is an annual STEM celebration.

While both of these take place in Washington DC, typically in the spring, they are fantastic experiences with a "convention center" full of activities, talks and information about STEM and mathematics. And a special shout out to Colorado State University Physics (which is almost math) for their incredible layout entitled "Little House of Physics" which captivates the USE Science & Engineering attendees.

It is astounding how quickly two years pass – so this will be my final Chair's Report, and I look forward to passing the baton on to **Alexander Hulpke**, from Colorado State University, who will assume the Section Chair position. I only hope that I can be as helpful to Alexander as **Kyle Riley** has been for me over the last two years. Special thanks to the many who help to make the communications within the section remain meaningful, timely and informative; to **Linda Sundbye** for her work to organize the section newsletter, to **George Heine** for his continued effort to make the section website friendly and usable and to **Shawna Mahan**, the section Vice Chair, for providing a rational view from the members representing the Community Colleges of the section. Continued thanks to **Heidi Keck**, the section representative, for keeping items like reports and section information up to date and keeping me moving in the right direction. Finally, to **Janet Barnett** and **Kyle Riley** for thoroughly reviewing and updating the section bylaws and helping to bring them into alignment with the expectations of the national office.

Our section secretary/treasurer **Spencer Bagley** has accepted a position out of state. Our National Representative **Heidi Keck** will also be leaving the section. We wish them both the best. We will be holding a special election at the April meeting to fill the remainder of their terms.

Update: Recommended Revisions to Section By-laws

At our section business meeting last April, in Pueblo, there was considerable discussion pertaining to electronic voting for section officers. Since officer voting procedures are specified in the Section By-laws, the Executive Committee asked Janet Barnett and Kyle Riley (they actually volunteered) to research and recommend language that would allow us to begin using electronic voting procedures in the future.

Following their review of the by-laws, Janet and Kyle recommended such language, along with several other revisions. These additional recommendations include obvious updates (ex. changing "Governor" to "Representative to the MAA Congress") that will bring our by-laws into alignment with recent changes at the national level, as well as several items intended to align by-law language with our actual section practices.

In accordance with Association procedures for section by-law changes, the Section Executive Committee has reviewed the recommended revisions, and submitted the revised document to the MAA Committee on Sections for their review. That Committee has in turn requested that several other revisions be considered, including changes to the makeup of the Teaching Award Committee and the quorum requirement for the section business meeting.

The Executive Committee is close to sending the latest – and we hope final! – set of revisions back to the Committee on Sections for their review. Once these final edits have been approved by the Committee on Sections, the

recommended revisions will be posted on the section website for your review and commentary – watch your e-mail for a notification of its availability. A membership vote on adoption of these changes which will take place the Annual Business Meeting at UNC. If approved, the final step will be approval by the national Board of Directors at Mathfest 2018.

Michael Jacobson, UC Denver
Chair, Rocky Mountain Section

MAA National Representative's Report

The MAA Congress met on January 9, 2018 during the JMM in San Diego. This is the second meeting of the group under this name and structure. Arguing over exactly what we do took up meeting time again, although we are settling into the idea that the Representatives to the Congress act as the voice of the membership, helping the Executive Committee and Board of Directors think outside the Washington DC area.

The particular task we worked in during this meeting was the new Core Values Statement of the MAA. The Executive Committee created a draft that was circulated electronically in the fall for discussion. During the face-to-face time we suggested large scale changes to the document. A small group is tasked with final polishing. This work was held up as an example of how the Congress should function in the future.

Informational items coming from the Association were generally about the new publishing contracts with AMS for books and Taylor & Francis for journals. Both of these are seen as ways to increase our reach and decrease our costs. The new Instructional Practices Guide is now available from the MAA website.

Growing the membership is always a concern and we are looking for ideas from you. If you have ideas or concerns about other things that you would like considered by the entire Association, please tell me about them.

Heidi Keck, WSCU
Representative, Rocky Mountain Section

23rd Annual Colorado Mathematics Awards Ceremony/Reception

Plans are underway for CMA XXIII -- the 23rd Colorado Mathematics Awards Ceremony and Reception to be held on Tuesday, May 10 at the Grant - Humphreys Mansion in Denver. At the school level we'll be recognizing the top ten participants on MATHCOUNTS, the AMC 8, 10, and 12 contests, and the members of the 2017 Colorado American Regions Mathematics League team. At the collegiate level we'll be recognizing all Section Putnam scorers in the top 500, and the top team(s) on the Mathematical Contest in Modeling. We expect to recognize between 50 and 60 winners. With the winners, parents, and teachers, we expect between 120 and 130 to attend the event.

We appreciate the support that the Rocky Mountain Section has provided for this event over the years.

Other sponsors of the Colorado Mathematics Awards the Professional Engineers of Colorado, and individual and past members of the Colorado Mathematics Awards Steering Committee.

Suggestions for additional sources of funding are always welcomed. Please contact me at gibbs_d@fortlewis.edu.

Thank you,

Dick Gibbs
Co-Chair CMA Steering Committee
Emeritus Professor of Mathematics
Fort Lewis College

Section News

Colorado School of Mines

Jon Helland was awarded the Outstanding Graduating Senior Award for Statistics due to his academic excellence in the class room and participation in extensive research on machine learning.

Cecilia Diniz Behn has recently published a SIAM Online News article entitled "*Mathematics of the Nap*", detailing a physiologically-based mathematical model of sleep/wake regulation. This model is currently being used to investigate the mechanisms driving the transition from napping to non-napping behavior in children.

Karin Leiderman was awarded an Army Research Office grant: *Incorporating Uncertainty to Improve Accuracy in Mathematical Modeling of Coagulation*

This award is in collaboration with Suzanne Sindi (UC Merced) and Dougald Monroe (UNC Chapel Hill).

Colorado State University - Pueblo

The Department of Mathematics and Physics at Colorado State University-Pueblo held its 40th Annual Math Day, including its Swanson and Math Bowl competitions, held on campus Thursday, Nov. 16, under the leadership and preparation of **Janet Nichols** (her 40th). More than 8,000 students have participated in Math Day since its inception with a significant upturn in female participants over the years. Swink High School has competed in 39 of the 40 Math Days, missing just the inaugural year. A total of 19 high schools including over 200 students participated this year. The Math Bowl Competition requires two three-person teams to go head-to-head in a 15-minute race for points. The Swanson Exam Competition, constructed and administered by. **James Louisell**, involves in-depth problem-solving at high school mathematics levels. Visits to laboratories and demonstrations in physics, biology, chemistry, and engineering were also available to students and sponsors. An excellent talk on Euler's formula was given by mathematics adjunct instructor **Pat Mara**. Janet Nichols was honored for her 40 years with a plaque and a 40th Math Day Tee-shirt.

https://www.chieftain.com/news/pueblo/students-compete-in-math-at-csu-pueblo/article_c7af4f32-1b78-5d07-93f1-498af74b60e3.html

Janet Heine Barnett, soon Professor Emerita of Mathematics at CSU-Pueblo, is teaching a special topics course, "Teaching Mathematics with History" this Spring Semester for about 20 students, with a mix of graduate and undergraduate students. Dr. Barnett is giving the Spring 2018 ColoMATYC Keynote Address March 2: "Revolutionary Mathematics: Liberating Ideas from History for Today's Teachers and Students."

Darren Funk-Neubauer is now in training for a Denali ascent this summer.

James Louisell's paper: "Imaginary axis eigenvalues of matrix delay equations with a certain alternating coefficient structure," has recently been accepted for publication in *Systems & Control Letters*.

Bruce Lundberg, professor of mathematics and department chair, taught a special course on celestial mechanics during the Spring 17 semester.

Igor Melnykov, associate professor of Mathematics has a recent publication: **"**Selenium speciation in the Fountain Creek Watershed and its effects on fish diversity," *J. Bio Inorg Chem* 22: 751-763.

Jonathan Poritz, associate professor of mathematics, is currently on leave. He recently had an article published in *Inside Higher Ed.* He

serves on the Colorado Open Educational Resource Council.

https://highered.colorado.gov/academics/groups/OERCouncil/schedule.html

Metropolitan State University of Denver

Mandi Schaeffer Fry is on sabbatical this semester at the MSRI in Berkeley. She is attending the semester program on Group Representation Theory and Applications, and working on her research on representation theory of finite Lie groups.

Mona Mocanasu again ran the annual Putnam Prep course this past fall, culminating with nine students taking the Putnam Exam in December. **Christopher Campbell, Ezra Dudden, Stephen Gerrells, Joseph Leavitt, Seth Lichtenstein, Ahern Nelson, Eric Roon, Joseph Ruiz, John Sheldon** happily spent the Saturday in December taking the exam. Eric Roon took the exam in Budapest where he was participating in a semester abroad program.

Statistics major **Laura Kinney Albrecht** was awarded the President's Award for Fall 2017 and was an invited speaker at the Fall 2017 Commencement. The President's Award is awarded to an exemplary student who has outstanding personal and professional achievements and superior academic achievements. Congratulations Laura for being the first math major to win this award!

Henc Bouwmeister took students **Daniel Diaz, Maria Garces-Jipa, Wivina Sitthisay, Roxanne Thoren, Jeff Rowell** and **William McKinney** to the SuperComputing 2017 conference held in Denver in November.

Elizabeth Ribble, Shahar Boneh, and **Nels Grevstad** took students **Keenan O'Brien, Ahern Nelson, Christopher Campbell, Laura Kinney, Jonathan Grant** and **JP deLong** to the Joint Statistical Meeting (JSM) in Baltimore MD last August.

Mandi Schaeffer Fry took students **Eric Roon** and **Kempton Albee** to the MAA MathFest in Chicago last summer where they presented their research entitled "Irreducible Character Restrictions in Low-Rank Orthogonal Groups." Their presentation won an Outstanding Presentation Award.

Computer Science major **Abdalla Elmedani** was awarded the Student Intern of the Year Award from the Applied Learning Center on campus.

Pikes Peak Community College

The Mathematics and English Division is proud of having hosted the Fall Mathematics Colloquium on December 1, 2017 at the Centennial Campus. Eighteen students, representing all three campuses, gave presentations to an audience of well over 50 PPCC students, faculty and staff.

Dr. **Michael Jacobson**, mathematics faculty at CU Denver, gave the keynote address, presenting an ode to Paul Erdős, one of the most prolific mathematicians of our times. Dr. Jacobson delighted the audience with his personal story and connections with Erdős as he spoke about Erdős' life and profound effect on the world of mathematics.

Recruitment efforts by the STEM Club and the Robotics Club were followed by eleven outstanding student presentations, which included Euler's Identity, Calculus and Programming, the Misuse of Statistics, Cantor's Diagonal Proof, the Number Pi, and the History of the Quadratic Formula. The event concluded with presentations by student interns with the NASA Community College Aerospace Scholars and Department of Energy Community College Internship programs.

The Mathematics Colloquium is a wonderful opportunity for STEM students to explore, present, and engage in various mathematical topics and discussions. You will not want to miss the Spring Mathematics Colloquium scheduled on Friday April 27, 2018 at the Rampart Range Campus. Please join the PPCC mathematics community in sharing, supporting, and empowering our students' mathematical journey.

Submitted by **Eugene Hamzezadeh** and **Caleb Maftei**

South Dakota School of Mines and Technology

Our highlight is not really a highlight, but a sad note. Professor **Carl Grimm** died on January 2, 2018 at the age of 91. He taught for the School of Mines from 1952 until 1988 and he was a beloved faculty member who loved exploring the hills. One big note of distinction is his published work on Grimm's Conjecture: each element of a set of consecutive composite numbers one can assign a distinct prime that divides it. For those that are interested, there is a memorial has been established in the name of Carl Albert Grimm for the Mickelson Trail. Checks should be made payable to: South Dakota Parks and Wildlife Foundation and mailed to 11361 Nevada Gulch Road, Lead, SD 57754-9801.
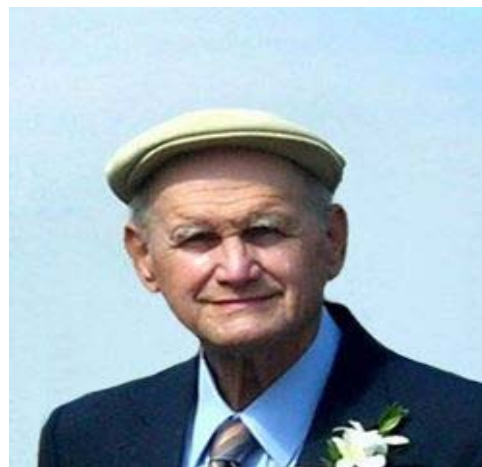
Is news from your school missing?
Send your news to your department liaison now with a request to forward it to the Linda Sundbye, Newsletter Editor for inclusion in the next issue. sundbyel@msudenver.edu

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MSU Denver to host the 2018 SCUDEM Modeling Competition April 21, 2018

Registration is open for teams of three high school or undergraduate students to compete in the Student Competition Using Differential Equation Modeling (SCUDEM).

MSU Denver is one the host sights for this year's national competition.

For more information, look for the announcement later in this newsletter and visit: http://simiode.org/scudem or contact:
Shelley Rohde srohde2@msudenver.edu

MAA MathFest Denver, Colorado August 1-4, 2018

Call for Papers: Contributed Paper Sessions at MAA MathFest 2018

The Mathematical Association of America will hold its ninety-sixth summer meeting in the Sheraton Denver Downtown Hotel, 1550 Court Place, Denver, Colorado, August 1-4, 2018. Full information regarding the program will appear in the April/May issue of *MAA FOCUS* and much of the program is already available online at www.maa.org/mathfest. The purpose of this announcement is to alert participants to the themes of contributed paper sessions. MathFest participants are invited to submit abstracts of papers consistent with the themes of the sessions described below.

This year the general contributed paper sessions are being replaced by an MAA Poster Session. The accompanying article contains information about the poster session.

The contributed paper sessions will be scheduled for Thursday, Friday, and Saturday, August 2-4. Information about scheduling will be posted on the MathFest website as soon as it is available.

Presentations in the contributed paper sessions are normally 15 minutes in length.

Each participant may make at most one presentation in a contributed paper session. If your paper cannot be accommodated in the session for which it was submitted, it will automatically be considered for the MAA poster session.

Each session room will be equipped with a computer projector and a screen. Speakers are encouraged to make use of the computer projector but must provide their own laptop computer or have access to one.

To submit an abstract for MAA MathFest 2018, go to www.maa.org/mathfest/abstracts and follow the instructions found there. The deadline for submission of abstracts is April 30, 2018. Early submissions are encouraged.

Call for Participants for the 2018 Section NExT-RM

What is Section NExT-RM?

The Rocky Mountain Section of the New Experiences in Teaching program (NExT- RM) is a smaller scale version of the national Project NExT program, specifically serving the members of the Rocky Mountain Section of the Mathematical Association of America (MAA). The goals of Section NExT-RM are to support faculty in the first five years of their academic career and to establish links among faculty in the section.

Who is eligible?

Section NExT-RM is open to non-tenured faculty members in the Rocky Mountain Section who are within the first five years of teaching at a university, four-year college, or two-year college within the Rocky Mountain Section of the MAA.

When is the meeting?

Our first meeting for the Section NExT-RM Fellows will be part of the Rocky Mountain MAA Section meeting that will be held **April 13-14, 2018** at University of Northern Colorado in Greeley. The Section NExT-RM sessions will occur both just prior to and just following the annual section meeting, beginning at noon on the 13th and ending by 5pm on the 14th. At this workshop, participants will discuss topics of special relevance to beginning faculty via sessions, panels, or workshops.

What are my expectations as a fellow?

Section NExT-RM Fellows will remain in contact with one another via an electronic network, and are expected to attend both the Spring 2018 and Spring 2019 Rocky Mountain MAA Section meetings. In particular, they will take part in the planning of some of the 2019 Section NExT-RM sessions.

Does this cost me anything?

Section NExT-RM is a selective professional development program and an application is required. We will provide the fellows with lunch on Friday and Saturday of the work- shop, and expect fellows to obtain travel and the remaining funding (approximately $150 for one night's hotel, registration, and banquet) from their departments or other sources.

How do I apply?

Submit the following to https://goo.gl/Tc9keq
- A personal statement, not to exceed 2 pages, about your teaching and/or research background, indicating what you hope to gain from Section NExT-RM and any topics you particularly hope are discussed in the meeting
- CV
- Letter of support from your department chair (Although departmental travel support is not required for acceptance, make sure your department chair indicates in the letter whether or not the department is providing travel support.) Such a letter can be submitted to the above site OR to aschaef6@msudenver.edu.

Questions? Contact the Section NExT-RM Coordinators **Mandi Schaeffer Fry**, MSU Denver (aschaef6@msudenver.edu) or **Rebecca Swanson**, Colorado School of Mines (swanson@mines.edu).

RMS Members invited to Site-Test with TRIUMPHS

The *Transforming Instruction in Undergraduate Mathematics via Primary Historical Sources* (TRIUMPHS) grant is now entering its third year, and cordially invites mathematics instructors at all RMS universities and colleges to join this national effort by site-testing our materials in your classrooms.

A national, seven-university NSF-funded collaboration, TRIUMPHS is actively developing, testing, and evaluating ready-to-use classroom materials based on primary historical sources for teaching undergraduate mathematics courses ranging from pre-calculus and elementary statistics to abstract algebra, analysis and topology.

These materials allow instructors to replace standard classroom lectures on core topics with "primary source projects" (PSPs) that directly engage students with the mathematics they are studying. Each PSP focuses on a particular mathematical concept or procedure as it was developed by a historic mathematician. Students read source documents by the original author, and through a series of exercises that are woven throughout the project, develop a fuller understanding of the mathematics they are studying as they react to the historical source, organize their thoughts about the mathematical ideas in the source, and rediscover groundbreaking ideas for themselves.

The TRIUMPHS collection of PSPs is still growing, but already includes 21 full-length PSPs and 12 shorter "mini-PSPs." Student-ready PSPs are available in pdf format from the TRIUMPHS website, with LaTeX code also available from PSP authors in order to allow instructors to tailor a project to better meet their course goals. We have also begun publishing our mini-PSPs as a series in *Convergence*, MAA's on-line journal dedicated to the use of history of mathematics in teaching.

With two of the team's PIs residing in our section - **Janet Barnett** (CSU-Pueblo) and **Diana White** (CU Denver) - RMS faculty are especially well-placed to participate in the site-testing opportunities that the grant will provide. Additionally, **Dave Ruch** (MSU-Denver) has developed a collection of Analysis projects as an external author for TRIUMPHS, and a growing number of Rocky Mountain Section members have joined our site-testing cadre.

Site tester support available now through the end of the grant in August 2020 includes a small stipend, as well as travel funds for a consultation visit to one of the PI sites, or to have a grant team member visit your home institution. Each PSP also comes with a set of *Notes to Instructors* offering guidance on classroom implementation. Site-tester application deadlines are October 15 for Spring academic terms, and June 15 for Fall academic terms.

For more information, please contact [Janet Barnett](#) or [Diana White](#), or visit the TRIUMPHS [website](#).

Section Nominating Committee Report

The nominating committee is excited to share information about two candidates nominated for the position of Vice-Chair for our section. This leadership position is vital to the organization and operation of the Rocky Mountain Section. Elections will be held during the business meeting at the MAA Rocky Mountain Section annual meeting to be held at the University of Northern Colorado, April 13-14, 2018.

The Vice-Chair serves a two-year term and is expected to (i) act as a contact with two-year and community colleges, (ii) attend all Executive Committee Meetings, (iii) serve on the Program Committee and arrange for programs for two-year and community college faculty, (iv) serve on the Distinguished Teaching Award Committee, and (v) Serve on the Committee on Profession Linkages, or designate a representative of two-year colleges. The Vice Chair should either be on the faculty of a two-year or community college or have a strong tie to one of these institutions.

If you have any questions, please free to contact any member of the nominating committee members:

- Gulden Karakok, Chair (University of Northern Colorado)
  Gulden.karakok@unco.edu
- Bruce Lundberg (Colorado State University - Pueblo)
  bruce.lundberg@csupueblo.edu
- Kyle Riley (South Dakota School of Mines and Technology)
  Kyle.Riley@sdsmt.edu

Note: Elected officers of the section must be members of the MAA.

With Gratitude,
The Nominating Committee

The candidates are:

1. **Shawna Mahan (Current Vice-Chair),** Associate Professor of Mathematics Pikes Peak Community College.
   Shawna has a BA in Mathematics (1988, CU Boulder) and a MS in Applied Mathematics (1995,

CU Denver). Shawna was hired in 2002 as full-time Mathematics faculty at Pikes Peak Community College. Prior to that she was three years at Community College of Aurora and eight years at Community College of Denver as an adjunct. Currently, she is Co-Chair of the College-Level Mathematics Department at PPCC.

She became a professional tutor at a community college in 1990 and discovered the joy of teaching mathematics. Since then, she has been teaching as an adjunct or full-time faculty member. Over the span of her teaching career, she has taught all the algebras, Mathematics for the Liberal Arts, Trigonometry, Precalculus, all three Calculus, Discrete Mathematics, Linear Algebra, and Differential Equations in a variety of formats. She has taught Intermediate Algebra and College Algebra frequently, specializing in the online format. She is very passionate about teaching and learning mathematics at any level and strives to be the best possible instructor. In 2009, she was honored to receive the Teaching Excellence Award bestowed by the Colorado Mathematical Association of Two-Year Colleges.

Shawna has been an officer in many local mathematical and educational societies: Secretary, Treasurer, Vice-President and President of CoADE; Treasurer, President-Elect, President, and Past President of ColoMATYC; currently she is the Vice-Chair of the RM-MAA. She has served on two national conference committees: NADE and AMATYC. She served as the Colorado Community College State Math Chair for two years and on State Faculty Curriculum Committee for two years. She loves networking and serving the mathematics community.

Currently, she enjoys creating Tactivities for College Algebra in a similar vein to the BOALA activities shared by CU Boulder and CU Denver. She and her department are organizing student mathematics colloquium opportunities for sharing and presenting mathematical ideas and problems.

2. **Shelly Ray**, Professor of Mathematics
   Aims Community College

Dr. Michelle "Shelly" Ray is a Professor of Mathematics and the former Director of Academic Assessment at Aims Community College. In her role as Director, she developed and established the foundation for the assessment practices currently in place at her institution. She is currently back in the classroom where her primary teaching areas include the Calculus sequence, Trigonometry, Statistics, Math for the Liberal Arts, College Algebra, Career Math, and Introduction to Education.

Shelly has been teaching at the collegiate level since 1999. Dr. Ray served as a consultant in higher education supporting best practices in assessment of student learning with colleges and universities, as well as the Colorado Department of Higher Education (CDHE). She was a lead consultant on the *Re-envisioning GTPathways* project for the State of Colorado working collaboratively with faculty from across the state to revise the competencies and learning outcomes for general education transfer courses. In working with colleges and universities to meet the demands of accreditation related to assessment of student learning, she advises on the development and implementation of multi-level institutional assessment plans and practices.

Dr. Ray currently serves on the Math Pathways Task Force for the State of Colorado as the two-year lead and presents the work of the task force at regional, state, and national events. She is the leading the efforts for the curriculum redesign in the Quantitative Reasoning/ Quantitative Literacy path including faculty professional development in best practices to engage these types of learners to support the redesign.

Mathematics and Statistics Awareness Month April 2018

Information for this year's Mathematics and Statistics Awareness Month will be available soon at:
   http://www.mathaware.org

University of Northern Colorado
to host the annual
Rocky Mountain Section Meeting
April 13 - 14, 2018

The 2018 Rocky Mountain Section meeting will be held April 13-14, 2018 on the campus of the University of Northern Colorado in Greeley, CO. The meeting promises two days of engaging speakers, student activities, book sales, and more.

Plenary Speakers for the meeting will include:

- **Dr. Matt Boelkins, "**Fibonacci's Garden"
  MAA Chair of the Congress and Professor of Mathematics at Grand Valley State.
  Banquet Speaker

- **Dr. Diane Davis**, "Building a Math Community"
  Associate Professor of Mathematics at Metropolitan State University of Denver and the Rocky Mountain Section's 2017 Burton W. Jones Distinguished Teaching Award recipient.

- **Dr. Robin Wilson,** "Eulers Pioneering Equation"
  Open University

Invited Talks by the Early Career Teaching Award recipients:

    Dr. Rebecca Swanson, Colorado School of Mines
    Dr. Mary Pilgrim, Colorado State University
    "Active Learning"

Friday Pre-Conference Workshop:

    Dr. Janet Barnett, Colorado State University – Pueblo.
"The Powerfully Scintillating Pedagogy of Primary Source Projects: Reading the Masters to Stimulate Student Learning and Transform our Teaching"

Panel Discussions:

    Joanie Funderburk, CCTM President and **Raymond Johnson,** CDOE Representative
"The Current State of Pre K-12 Math Teaching in Colorado by CCTM"

    Spencer Bagley, Hortensia Soto-Johnson, Gulden Karakok, University of Northern Colorado, "Adopting and Adapting the MAA Instructional Practices Guide"

Contributed Paper Sessions including:

Teaching using Open-Source Materials
The History of Mathematics and its Use in Teaching
General Mathematics
Mathematics Education Research
Undergraduate Student Presentations

Student Jeopardy!

Post-Conference Section NExT meeting

Further details of the meeting, including online registration and online submission of presentation proposals can be found on the meeting webpage located at: https://digscholarship.unco.edu/maa_rms2018/.

Registrations should be submitted by March 21 to receive the early registration discount. Abstracts are also due by March 21.

CALL FOR SUBMISSIONS
    We invite submissions of proposals for presentations at the meeting. Proposals should include a title, abstract, and the session that they should be considered for, and may be submitted from the meeting webpage at https://digscholarship.unco.edu/maa_rms2018/.

Please direct questions to the Program Co-Chairs:
    Oscar Levin oscar.levin@unco.edu or
    Nathaniel Miller nathanial.miller@unco.edu

Student Activities

Please join us at the Rocky Mountain Section Meeting in April. Enjoy these great activities!

Free lunch and games session on Friday April 13. When you arrive at the conference, there is a free student lunch and board games session (pizza for most; allergen friendly food available, especially if you email me with specific allergies). Please come and join us

Give a talk! This conference is a great place to give a talk to fellow students and faculty members. Prepare your talk and sign up to present in a student session!

This is Jeopardy! Come to compete or to cheer on your favorite team! Get together a team of 4-5 students from your school or sign up to be put on an "inter-school" team. There is a limited number of teams; they will be entered in the competition on a first-come, first-served basis. There is also a limit of 5 students on the inter-school team, so register early! Details will be available at the conference website.

Please direct questions to Beth Schaubroeck, beth.schaubroeck@usafa.edu.

SCUDEM 2018 MODELING COMPETITION

Competition Saturday - 21 April 2018

Registration: 1 February – 1 April 2018 - see simiode.org/scudem.

Student Competition Using Differential Equation Modeling

Form a team and challenge yourselves in a friendly community to learn and show your skills in this unique competition for modeling with differential equations! Registration for teams of three high school or undergraduate students opens 1 February 2018.

Teams and coaches gather Saturday 21 April 2018 at over 95 local sites around the United States and beyond to present their findings at a day for presentation, networking, learning, and faculty development. Also for students there is a fun Math Bowl.

www.simiode.org
SIMIODE A SYSTEMIC INITIATIVE FOR MODELING INVESTIGATIONS & OPPORTUNITIES WITH DIFFERENTIAL EQUATIONS

Modeling First Differential Equations

Build modeling skills

Network with peers

Students publish their models in SIMIODE

Faculty Development Program on Modeling

Sample problems and SCUDEM 2017 results simiode.org/scudem
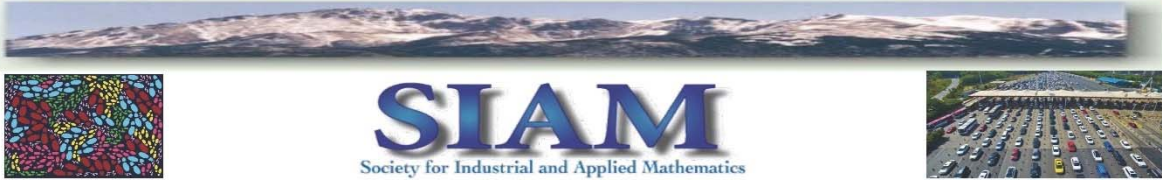
SIMIODE
SIMIODE.org/scudem

Questions? Please contact:
Director@SIMIODE.org

Registration:
1 February – 1 April 2018

Register early. Do not miss your chance to learn and grow.

SIAM 14th Annual Front Range Applied Mathematics Conference
University of Colorado - Denver, March 3, 2018

SIAM
Society for Industrial and Applied Mathematics

14th Front Range Applied Mathematics (FRAM) Student Conference

UNIVERSITY OF COLORADO - DENVER
SATURDAY, MARCH 3RD, 2018

SPONSORS: THE SIAM STUDENT CHAPTERS AT
University of Colorado: Boulder, Colorado Springs and Denver campuses
Colorado School of Mines, Colorado State University, Colorado College, Metro State, U. Wyoming

The Front Range SIAM Student Chapters are sponsoring the 14th Annual Applied Mathematics Regional Student Conference. This event allows students from all universities along the Front Range to learn about new developments in Applied Mathematics and promotes interest in the field. The conference is open to *both* undergraduate and graduate students.

Registration Information

The registration fee is $10 for students and $20 for everyone else, to help defray the cost of the breakfast and lunch that will be provided at the conference. Cash or checks are welcomed. Checks should be written to "CU Denver SGA". Inquiries about registration should be directed to Dr. Varis Carey, Faculty Advisor, (variscarey@googlemail.com), or Michael Phillips, President of the SIAM Student Chapter at CU Denver (Michael.2.Phillips@ucdenver.edu).

Registration and Breakfast will open at 8:30am with talks beginning at 9am. The conference will take place on the 4th floor of the Student Commons Building (1201 Larimer Street) on the Auraria campus, in downtown Denver.

Call for Presentations

There will be 20-minute student presentations. A special MCM/ICM session will also be organized. Please send abstracts in LaTeX (.tex) or plain text (.txt) format to FRAMSC.abstracts@gmail.com. For more info, please check the conference website or contact the organizers.

Abstract submission deadline is Friday, Feb 23, 2018!

Contact Information

University of Colorado Boulder:
Dr. Anne Dougherty, anne.dougherty@colorado.edu
Dr. Stephen Becker, stephen.becker@colorado.edu

University of Colorado Colorado Springs:
Dr. Radu Cascaval, radu@uccs.edu

University of Colorado Denver:
Dr. Varis Carey, variscarey@googlemail.com,

Colorado School of Mines:
Dr. Mike Nicholas, nicholas@mines.edu

Colorado State University:
Dr. James Liu, liu@math.colostate.edu

Colorado College:
Dr. Stefan Erickson, serickson@coloradocollege.edu

University of Wyoming:
Dr. Lynne K. Ipina, ipina@uwyo.edu

Metro State University:
Dr. Henc Bouwmeester, hbouwmee@msudenver.edu
Dr. Brendan Fry, bfry2@msudenver.edu

Plenary Speaker

Dr. Benedetto Piccoli
Rutgers University - Camden

Modeling of Crowd Dynamics

During the holiday shopping season, malls seem to be as crowded as busy city streets. It's a pedestrian traffic jam from store to store as people try to navigate the pathways that will lead them to the perfect holiday gift, and maybe even a bargain. Trying to get around or through droves of people isn't just a science perfected by savvy shoppers. The modeling of such phenomena need to take into account various aspects, for instance psychology, which studies the cognitive processes behind the action of walking; and mathematics, which attempts to quantify the laws that govern the way crowds of people move or interact.
Topics will include:
1. The phenomenology of crowd dynamics: self-organization, patterns and cognitive processes.
2. Experiments with crowds: what to measure, how to measure, experimental settings.
3. Modeling crowd dynamics: choice of the scale, ODE and PDE models, new measure theory approach.
4. Measure-theory multi-scale models: math behind, properties of the model, numerics and simulations.

Dr. Benedetto Piccoli is the Joseph and Loretta Lopez Chair of Mathematics at Rutgers University - Camden. Dr. Piccoli is the author of several books and scholarly articles on crowd dynamics and traffic flow. Piccoli's recent book, Multiscale Modeling of Pedestrian Dynamics (Springer, 2014), brings together two disciplines when analyzing crowd dynamics: psychology, which studies the cognitive processes behind the action of walking; and mathematics, which attempts to quantify the laws that govern the way crowds of people move or interact.
For more information, visit http://piccoli.camden.rutgers.edu/

Conference Website: http://goo.gl/w1Uj8J

MAA Rocky Mountain Section
Suggestions for Speakers

The Rocky Mountain Section would like to offer the following suggestions, especially to first-time speakers, regarding preparation of a talk at the conference.

1. The standard talk length is 20 minutes, (with longer times available upon request, subject to the limitations of the program). Thus, you should prepare your presentation to fit the time allotted. If possible, plan to leave a few minutes at the end of your presentation for questions.

2. A moderator will be assigned to facilitate each session of presentations. The moderator will introduce the speaker, assist in distribution of any handouts, signal the end of the presentation, and ask for questions from the audience.

3. If handouts are to be provided, give them to the moderator prior to the beginning of the session including your talk. Plan to bring about 35 handouts and be prepared to give attendees your e-mail address in case the supply runs out. It may also be possible to arrange for posting of electronic materials from your talk on the section website. Check with program organizers concerning this possibility.

4. Do not include too much detailed technical material in your presentation. Focus on providing the audience with insight into your topic and its key notions. Remember that most members of the audience will not be experts in the field you are discussing, and that the audience is likely to include students.

5. All session rooms will be equipped with a projector and a laptop hook up. Accordingly, you can present your talk using Power Point slides, PDF, or similar, which will greatly enhance the pace of a presentation. However, make sure that notes on the slides or transparencies are typed in a font big enough and with spacing adequate to be seen clearly 50 to 100 feet away.

Section Activity Grants Available

The purpose of the Section Activity Grants program is to assist Section members in funding projects in support of Section Mission. These projects must be clearly tied to one or more of the Rocky Mountain Section Mission Goals and the project director must be a member of MAA. Grants will not exceed $750 per project. Matching funds from host institution are preferred, but not required. To apply for a Section Activity Grant, submit the following to the Section Secretary/Treasurer:

(a) Description of project (no more than one page);

(b) Statement of how project supports Mission Goals (no more than one page);

(c) Estimated budget;

(d) Description of matching funds available, if any;

(e) Vitae of project director(s).

If funded, a report on the project will be filed by the Project Director upon completion (no more than one page) and a report will be made at the next meeting of the Section. Complete details on the selection process and application guidelines are posted on the section website. Grants will be reviewed once a year. All application materials are due November 1st of each year.

Student Recognition Grants Available

The establishment of a Student Recognition Grant Program was approved by the section membership at the 2003 Annual Business Meeting. In support of this program, the Section will set aside $500 every calendar year. From these monies, the Section will make grants for the purpose of recognizing superior achievement in mathematics on the part of (1) students enrolled in post-secondary institutions within the geographic region served by the Section and (2) high school students whose school districts, or other appropriate political subdivisions, substantially intersect the geographic region served by the Section.

Proposals for such grants must

1. Originate from a member of the Rocky Mountain Section of the Mathematical Association of America on behalf of an agency, institution, or organization whose stated purposes are consistent with recognizing or encouraging superior academic achievement at the high school level;

2. Be in the hands of the Chair of the Rocky Mountain Section no later than March 15 of the year in which the proposed recognition is to be made;

3. Include the criteria under which superior achievement in mathematics is to be recognized, together with the time and the manner of such recognition;

4. Report, insofar as possible at the time of the proposal, other potential sources of support together with proposals or requests made or intended; and

5. Be limited to a maximum amount of $250.

The Executive Committee will review all proposals for grants under this policy and will make such grants as, in its sole judgment, it deems proper. In keeping with the section mission, funding priority will be given to grants that include recognition of undergraduate students. Funding decisions will be announced no later than the Annual Business Meeting of the Section. Monies not expended during any particular year shall revert to the Section's general fund.

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 π; 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

ICTCM; Washington DC
    March 15-18, 2018
MAA Rocky Mountain Section Meeting;
    University of Northern Colorado, April 13-14, 2018
NCTM annual meeting; Washington DC
    April 25-28, 2018
MAA MathFest; Denver, CO; August 1-4, 2018

Joint Mathematics Meetings; Baltimore, MD
    January 16-19, 2019
NCTM annual meeting; San Diego, CA
    April 3-6, 2019
MAA Rocky Mountain Section Meeting;
    Fort Lewis College, Durango, CO,
April 12-13, 2019
MAA MathFest; Cincinnati, OH;
    July 31-August 3, 2019

Joint Mathematics Meetings; Denver, CO
    January 15-18, 2020
NCTM Centennial Meeting; Chicago, IL
    April 1-4, 2020
NCTM annual meeting; St. Louis, MO
    October 21-24, 2020
MAA MathFest; Philadelphia, PA;
    July 29-August 1, 2020

Joint Mathematics Meetings; Washington DC
    January 6-9, 2021
NCTM annual meeting; Atlanta, GA
    September 22-25, 2021
MAA MathFest; Sacramento, CA;
    August 4-7, 2021

Joint Mathematics Meetings; Seattle, WA
    January 5-8, 2022
MAA MathFest; Washington DC;
    August 3-6, 2022

Joint Mathematics Meetings; Boston, MA
    January 4-7, 2023

The Rocky Mountain Section of
The Mathematical Association of America

Burton W. Jones Award
for Distinguished College or University Teaching of Mathematics

Burton W. Jones Award Nomination Form

Name of Nominee _____
(First name first)

Email Address _____

College or University Affiliation _____

College or University Address _____

City _____ State _____ Zip _____

Is the nominee a member of the MAA? _____

Number of years of teaching experience in a mathematical science _____

Has the nominee taught at least half time in a mathematical science
for the past three years (not counting a sabbatical period)? _____

On a separate page, briefly describe the unusual or extraordinary personal and professional qualities of the nominee that contribute to her or his extraordinary teaching success.

Name of Nominator) _____
(First name first)

Address of Nominator _____

_____

Email Address _____

Telephone: Work _____ Home _____ Fax _____

Nominator's Signature _____

Nomination forms should reach Section Awards Coordinator by December 15 of each year.
Complete nomination materials should reach Awards Coordinator by January 15 of each year.

Jeremy Muskat, Section Awards Coordinator,
Western State Colorado University, Hurst Hall, Gunnison CO 81231

Please consult the Section webpage (http://sections.maa.org/rockymt) for complete guidelines.

The Rocky Mountain Section of
The Mathematical Association of America

Early Career Teaching Award
for Excellence in Teaching in the Mathematical Sciences

Early Career Teaching Award Nomination Form

Name of Nominee
(First name first) _____

Email Address _____

College or University Affiliation _____

College or University Address _____

City _____ State _____ Zip _____

Is the nominee a member of the MAA? _____

Has the nominee taught at least half time in a mathematical science
for at least two but not more than seven years? _____

On a separate page, briefly describe the unusual or extraordinary personal and professional qualities of the nominee that contribute to her or his extraordinary teaching success.

Name of Nominator)
(First name first) _____

Address of Nominator _____

_____

Email Address _____

Telephone: Work _____   Home _____   Fax _____

Nominator's Signature _____

Nomination forms should reach Section Awards Coordinator by December 15 of each year.
Complete nomination materials should reach Section Awards Coordinator by January 15 of each year.

Jeremy Muskat, Section Awards Coordinator,
Western State Colorado University, Hurst Hall, Gunnison CO 81231

Please consult the Section webpage (http://sections.maa.org/rockymt) for complete guidelines.

Early Career Teaching Award Guidelines

Part of the core mission for the Rocky Mountain Section is to provide recognition for quality mathematics teaching. The Early Career Teaching Award was established to recognized excellence in teaching in the mathematical sciences for faculty that are early in their career.

Eligibility
Nominees must:
- Hold a doctorate degree
- Be college or university teachers who have held a full-time faculty appointment in a college department of mathematical sciences in the Rocky Mountain Section for at least two, but not more than seven, years since receiving the doctorate. A nominee who has just started the eighth year of teaching at the time of the application is still eligible for the award. If a nominee has held his or her doctorate for more than seven years, then the nominator must indicate on the nomination form the times that the nominee was not teaching. Common exceptions to the 7-year limit are maternity, paternity, family, or medical leaves. Sabbaticals and postdoctoral fellowships are exceptions only if they involved no teaching and the application does not include accomplishments made during these times.
- Hold membership in the Mathematical Association of America

Guidelines for nomination
Nominees for the award may be made by any member of the Rocky Mountain Section of the MAA. Nominees should:
- Be recognized as extraordinarily successful in their teaching
- Have effectiveness in teaching undergraduate mathematics that can be documented
- Have had influence in their teaching beyond their own classrooms
- Foster curiosity and generate excitement about mathematics

Nomination form is due December 15
Complete nomination packet is due January 15

Nomination Packet
A complete nomination packet should consist of the following documentation as it is described below.

1. **Nomination Form *and One-Page Summary*** - Describe the unusual and personal and professional qualities of the nominee that contribute to his or her extraordinary teaching success, and attach to this completed nomination form.

2. **Narrative (Up to 2 pages)** - Describe the nominee's extraordinary success in teaching by providing a narrative of the nominee's background, experience, teaching style, special contributions, other teaching awards, and any additional evidence of the nominee's unusual achievement in teaching. Note especially effectiveness in teaching undergraduate mathematics and influence beyond the nominee's own classrooms. The narrative should not exceed two single-spaced pages.

3. **Additional Documentation (Up to 2 pages)** - Submit no more than two pages of further evidence to document the nominee's extraordinary teaching success. This documentation will vary greatly from institution to institution, but may include summaries of peer or student evaluations, comments on teaching, possible increases in numbers of majors in mathematics (with clear evidence of the nominee's substantial responsibility for them), possible student success in mathematics competitions (with clear evidence of the nominee's substantial responsibility for them), success in research in mathematics conducted by undergraduate students under the direction of the nominee,

production of superior quality honors theses by undergraduate students under the direction of the nominee, development of curricular materials successfully used by colleagues, adoption of the nominee's teaching methods or techniques by experienced colleagues, service as a respected adviser for a student group, etc.

Nominators should bear in mind that the selection committee for the award might view a nomination more positively if it is accompanied not just by carefully chosen testimonials from a few selected students and faculty, but also reports comments and criticism which is representative of the whole spectrum of opinion among students and faculty on the nominee's teaching.

4. **Letters of Recommendation (Each letter is one page. Maximum of 5 letters.)**
   o Two letters from the nominee's present or former students.
   o One letter from the nominee's colleagues (could be the department chair).
   o At most two additional letters from anyone qualified to comment on the nominee's extraordinary teaching success, including additional students and/or colleagues.

Voluntary Section Dues

Many thanks to those members who have made a voluntary dues contribution to the section along with their Spring Meeting Registration!

Although the section has found itself in good financial health in recent years, additional funds are always needed in order to pursue special initiatives suggested by the membership. The successful John Fauvel Memorial Conference and William Dunham Special Lecture, both supported in part by the Section Activity Grant program, provide excellent examples of what can be done with even a small amount of funding to support our section mission and goals.

Contributions may also be made in support of the Pikes Peak Regional Undergraduate Mathematics Conference; simply choose "Other" on the coupon below, and specify "PPRUMC" in the space provided.

A voluntary section dues contribution from you now can help build up funds in support of similar initiatives!

To submit your dues, simply return the coupon below with a check for any amount you wish - every little bit will help, and all contributors will receive a letter acknowledging the contribution for their financial records.

MAA Rocky Mountain Section Voluntary Dues Contribution Form

Name   _____

Address   _____

_____ **ZIP** _____

Please indicate in the space provided how you would like your dues to be used:

_____   Undergraduate Student Initiatives
_____   Graduate Student Initiatives
_____   Teaching Award Fund (Burton W. Jones DTA and ECTA)
_____   Section Activity Grant Program
_____   Wherever needed most
_____   Other: _____
_____   **TOTAL DUES PAID ($10 recommended)**

Please make check payable to: **MAA Rocky Mountain Section** and return to:
Spencer Bagley
MAA Rocky Mountain Section Treasurer/Secretary
University of Northern Colorado
School of Mathematical Sciences
501 20th St, Campus Box 122
Greeley, CO 80639

MAA Rocky Mountain Section
Mission Statement

**To promote excellence in mathematics education,
especially at the collegiate level.**

Mission Related Goals

1. To foster scholarship, professional development, and professional cooperation among the various constituencies of the mathematical community within the region.

2. To foster the implementation and study of recent research recommendations for the teaching, learning and assessment of collegiate mathematics.

3. To support the implementation of effective mathematics preparation programs of prospective teachers at all levels.

4. To enhance the interests, talents and achievements of all individuals in mathematics, especially of members of underrepresented groups.

5. To provide recognition of the importance of mathematics, mathematical research and quality mathematics teaching, and promote public understanding of the same.

6. To provide regional leadership in the promotion of systemic change in mathematics education, and in the enhancement of public understanding about the needs and importance of mathematical research and education.