FALL 2019 NEWSLETTER

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

Fall 2019 Newsletter in PDF Format for Printing

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Travis Kowalski given 2019 B.W. Jones Distinguished Teaching Award

In 1991, the Mathematical Association of America instituted Awards for Distinguished College or University Teaching of Mathematics in order to honor college or university teachers who have been widely recognized as extraordinarily successful and whose teaching effectiveness has been shown to have influence beyond their own institutions. In 1998, the Rocky Mountain Section passed a motion to name the Section Distinguished Teaching Award after Burton W. Jones (1902&endash;1983) who was a lifelong advocate of excellence in teaching at all levels and a strong supporter of the MAA. The Rocky Mountain Section has had a long history of awarding the honor to faculty from a broad swath of institutions in the section.

The 28th recipient of the Rocky Mountain Section, Burton W. Jones Distinguished Teaching Award is **Travis Kowalski** from South Dakota School of Mines and Technology. Although Dr. Kowalski's support and nomination letters indicate the many facets of his teaching excellence as part of his faculty position, it is the following note from his nominator:

> "…Of course, the great majority of Dr. Kowalski's work is centered on his everyday job of teaching undergraduate mathematics at SDSMT. Here is where he really shines! Though he has experimented with and mastered a variety of teaching techniques … Dr. Kowalski is first and foremost an exceptional lecturer."

This excitement for expanding the mathematical knowledge by Dr. Kowalski is also highlighted by the 2017 George Polya Award from the his College Mathematics Journal article "The Sine of a Single Degree". Quoting Dr. Kowalski,

> "I view teaching as the communication of not just knowledge about a subject but also excitement for it"

which is a key component for encouraging students to follow their own mathematical pursuits.

Finally, special thanks goes out to **Donald Teets** for the

time and effort that was spent collecting and preparing the nomination materials and documentation for this nomination of Professor Kowalski.

2020 Distinguished Teaching Award Call for Nominations

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 MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College for 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, by 15 December 2019. Complete nomination materials (described on the website) are due 15 January 2020.

Kenneth Monks given Early Career Teaching Award

In 2015, the Rocky Mountain Section approved a new teaching award, in order to recognize faculty early in their career. The award was inspired by the National MAA, **Henry Adler Award**, which has been active since 2004. The establishment of this award affords the section the opportunity to recognize faculty members that are MAA members, teaching at a Rocky Mountain Section Institutions of Higher Education and are early in their career. The section sees this as a wonderful companion to the section's Burton Jones Distinguished Teaching Award. The 2019 recipient of the Rocky Mountain Section of the MAA — Early Career Teaching Award is **Kenneth Monks** from The Front Range Community College — Boulder County Campus.

Dr. Monks has followed a very rare path, as noted by his nominator. After graduating with his PhD in mathematics, he joined the faculty at Front Range Community College where he has taught a wide range of courses, from Math for Liberal Arts to Linear Algebra. He has earned the reputation of being an inspirational teacher who will go to extraordinary lengths to help students. In addition to the "regular" courses, Ken freely offers advanced independent study courses. He has developed an open source Calculus textbook, is the math lab coordinator and coaches the FRCC Putnam Club — a rarity, for a community college to have a Putnam Exam team.

One student noted, “There are many great teachers … I believe that Ken Monks' combination of skill, talent and dedication as a teachers surpasses any other teacher with whom I've worked. His ability to simultaneously foster a love of math in his students, while helping them succeed in solving difficult problems puts him in a class of his own”

Another wrote, “Not only does Professor Monks want his students to be successful in his classroom, but he aims to set them up to achieve their career goals. Each semester he organizes STEM career talks, where he has different speakers come in and talk about how the mateial that studens are learning in the classroom is applicable to the workforce.”

A colleague noted, “&hellp;His passion and knowledge of mathematics is evident, and it motivates his students. His lessons are masterfully designed; incorporating history, inquiry-based activities and dynamic lectures.”

Special thanks goes to **Janet Barnett** for the time and

effort devoted to collecting and preparing the nomination documentation for Dr. Monks.

2020 Early Career Teaching Award Call for Nominations

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, by **15 December 2019.** . Complete nomination materials (described on the website) are due **15 January2020** .

Chair's Corner

Dear Members and Friends of the Rocky Mountain Section,

The return of fall brings again more moderate temperatures, the start of classes (and - sadly - the far too soon end of my sabbatical), and a new sectional newsletter. After serving for 15 year (or has it been even more?) our newsletter editor **Linda Sundbye** has handed over the reins. I am deeply indebted to Linda for serving for so long (and so successfully) in this role, while dealing with forgetful contributors and late submissions. Linda leaves big footsteps to fill, which **Pam Peters** courageously and kindly has offered to do. Thank you!

Also stepping down is our Student Activity Coordinator, **Beth Schaubroeck**, again having served for longer than I can remember.

Thanks are also due to my predecessor, **Mike Jacobson**, who finished his commitment by serving for the last year in the role of past chair. This role is now being filled by **Dan Swenson**, as chair-elect. The election (our first electronic one) was managed competently by the nomination committee, in particular its chair **Kyle Riley**. This also gives me the opportunity to thank **Gulden Karakok**, who finished her three-year stint on this committee. Gulden kindly offered to take on the role of MAA representative on the CCTM (Colorado Council of Teachers of Mathematics) board, following up on **Heather Johnson**, who generously served in this demanding role for the last year.

This brings me to the first point I would like to make in this letter: The section can only work if there are members volunteering their time and experience. While our code specifies that many of these positions are named by the elective officers, this "naming" in practice requires volunteers to be available. Please let me (or other officers) know if you think you could contribute to the section in this way!

My second point, and another opportunity to contribute to the section, is our annual meeting. I'm in debt to **Laura Scull**, **Veronica Furst**, and may other helpers (whose names I forgot to write down) for hosting us at beautiful Fort Lewis College for our annual meeting in April. I understand that Durango was long travel for many of us, but I so far have been given the impression from talking with many of you, that it is desirable to have meetings move around institutions, as it offers the opportunity to see other campuses and learn how they are approaching the challenges of our profession. We are aiming to have meeting locations provide an ε-cover of our geographic spread when integrating over multiple years, but for this to be feasible we also need locations. Please talk to me (or one of the other officers) if you think your department could host a future meeting.

We will return for our next annual meeting to a more central location for our 2020 meeting at Metropolitan State University in Denver on April 17–18, 2020. This will not be your only chance to visit Denver: The Joint Mathematics meetings will roll into Denver January 15–18, 2020, promising the biggest math event in the Mountain West since times immemorial.

My third point is a regular item for the fall newsletter, but I would like this year not only to advertise, but really to urge you to make use of these opportunities: Our section offers small (I think $500–$750, if I recall correctly) Section Activity Grants to help with funding activities that fit the mission of the MAA, in particular if they are not only localized in one place but have a broader geographic impact. (We also prefer to support items that broaden participation than pay for line items (such as invited speakers) that typically can be funded from other

sources.) Applications should reach the Section Secretary by November 1.

The second opportunity that I urge you to pursue is our sectional teaching awards (Early Career and the Burton W Jones Award), which will be due in short form on December 15 (with a full nomination package to be submitted by January 15). I would like to encourage you to nominate your colleagues, both Junior and Experienced, for these awards. Nominations are valid for two years, which makes success rates much better than those for an NSF grant.

We mathematicians are often shy in pointing to excellence in our discipline, which makes some administrations believe falsely that teaching excellence sits only with other subjects that produce an award every other month. Nominating your colleagues is one way how you can counteract such impressions, for the ultimate benefit of not only your colleague and your department, but ultimately for our whole discipline.

You find details on the nomination process on our sections web pages (which **George Heine** kindly maintains, giving me the opportunity to close with another thanks. I thus close with all the best wishes for the rest of the year, and with the hope to see many of you (twice!) in Denver the next year!

Alexander

Alexander Hulkpe,
CSU — Fort Collins
Chair, Rocky Mountain Section

MAA National Representative Report

The MAA Congress met for a full day on July 31, 2019 during MathFest in Cincinnati, OH. The morning included introductions and a discussion of the expectations for members of congress. MAA Past-President Deanna Haunsperger spoke on micro-volunteering (volunteering in 1-3 hour time blocks) and encouraged members to participate. She was also looking for feedback on possible types of micro-volunteering. Next Executive Director Rachel Levy presented two new MAA goals which were approved by the congress (after discussion): 1) To curate and develop our robust portfolio of programs that expand MAA's outward facing impact. 2) To celebrate the power of mathematics on an international scale through successfully housing the 2021 IMO in Washington, DC, and leveraging the event to strengthen the reputation of the MAA. Note that information about the MAA programs portfolio can be found here.

During the afternoon session representatives of congress were able to give a quick 2-minute report of happenings in their section and some discussion was held around sections and how to better support them. Lisa Marano, Committee on Sections Chair , has been part of a task force which has been investigating ways to increase support for sections including visitor/lecturer programs. They are working on ways of improving communication between sections. A discussion was also heard during the afternoon on how to include more voices in the MAA congress. A recommendation was voted on that increased the number of at-large reps to the congress (by 2), and more clearly defined some of the at-large categories.

The Congress closed with elections and **Tim Chartier** was elected as the new Chair of the Congress. Additionally, MAA President Michael Dorff addressed the congress with an inspiring speech and he outlined four important ideas for the congress:

1. Identifying and cultivating future leaders of the MAA.
2. Micro-volunteering — look for opportunities.
3. Promote BIG and PIC math.
4. People and community are what makes the MAA great — encourage people to become members.

Please don't hesitate to reach out if you have ideas or concerns about other things that you would like considered by the MAA.

Debra Carney,
Colorado School of Mines
Representative, Rocky Mountain Section

Section Nominating Committee Report

This will be an active year for elections for the Rocky Mountain Section. The elections on tap this year include:

- Vice-Chairperson — two-year term
- Secretary/Treasurer — three-year term
- Section Representative to the national MAA Congress — three-year term

As you may recall, all section elections will now occur electronically. The Congressional Representative election is administered by the national office and occurs on their time scale and according to their process. The process to elect the Vice-Chairperson and the Secretary/Treasurer follows the process in our by-laws where nominations are gathered by the nominating committee until three weeks prior to the annual meeting. The list of nominees will be provided to the current Secretary/Treasurer for distribution to the section members. At the section business meeting the list of nominees will be presented and there will be an opportunity for nominations from the floor. Once the business meeting is concluded the nominating committee will proceed with the process to administer the election electronically. In all cases, an officer of the section must be a member of the MAA in order to serve as a section officer and it is also expected that officers attend each section executive committee meeting.

Self-nominations are allowed so if you are interested, or you would like to nominate someone, then please feel free to contact any member of the nominating committee:

- Nathaniel Miller (University of Northern Colorado) nathaniel.miller@unco.edu
- Greg Oman, Chair (University of Colorado, Colorado Springs) goman@uccs.edu
- Kyle Riley, (South Dakota School of Mines and Technology) Kyle.Riley@sdsmt.edu

Descriptions for each officer position is given below.

Respectfully submitted,
The Nominating Committee

The *Vice-Chairperson* shall assume the responsibilities of the Chairperson if the Chairperson is absent or incapacitated. In each year during which the Officers of the Section include a Past-Chairperson, the Vice- Chairperson shall appoint a member for a two-year term to the Teaching Award Committee. This individual must be associated with a two-year school. The Vice-Chairperson also appoints the Student Activities Coordinator to a three-year term. The Vice Chairperson should represent the interests of the two-year colleges and encourage two-year college faculty members to participate in MAA activities and programs.

The *Secretary/Treasurer* shall be responsible for the records of the Section, the filing of reports to the MAA office, and for mailings to the Section (call for papers, program announcements, etc.). In addition, the Secretary/Treasurer shall ensure that the recommendations of the MAA and/or the Section's Executive Committee be carried out effectively. The Secretary/Treasurer will keep all books and accounts, receive and be responsible for all Section funds, and pay all bills of the Section from its funds. The Sectary/Treasurer appoints individuals to serve in the following positions: Section Award Coordinator, Newsletter Editor, Web Master. Moreover, the Secretary/Treasurer is the public communications officer for the section. Lastly, the Secretary/Treasurer is an ex-officio member of all standing committees.

The *Section Representative to Congress* is the liaison between the section and the national organization. The Congress Representative is expected to attend each of the annual meetings of the congress; partial funding is typically provided by the national MAA for travel to the annual meeting. The Congress Representative appoints a committee member to the section activity grant award committee and also appoints a higher education representative to the CCTM governing board. The Congress Representative also appoints the Section Book Sales Coordinator.

New Student Activities Coordinator

Dr. Divya E. Vernerey, CU-Boulder, has accepted a nomination to be the new Student Activities Coordinator for the Section. Dr. Vernerey is a senior instructor at CU-Boulder and currently runs their student Math Club. Contact information for Divya can be found on the section website. Welcome, Divya!

Section News

Colorado School of Mines

The Mines' Applied Mathematics and Statistics department is happy to introduce and welcome our new members.

Dorit Hammerling
Associate Professor, Applied Mathematics and Statistics
PhD University of Michigan

Dorit Hammerling is a statistical scientist interested in spatio-temporal statistical methods applied to the geosciences, with a focus on massive data from satellites and climate models. Hammerling comes to Mines from NCAR where she was most recently a Project Scientist II in the Analytics and Integrative Machine Learning Group.

Jennifer Ryan
Associate Professor, Applied Mathematics and Statistics
PhD Brown University

Jennifer K. Ryan specializes in designing and developing better techniques for simulating real- world phenomena. She investigates and exploits the underlying mathematical theory, not only to improve the method itself, but also to build faster algorithms. The techniques that she develops can be exploited for use in imaging, data extraction, detection of discontinuous phenomena, visualization of fluids, and more. Her work has been funded by both the European Commission and the U.S. Air Force Office of Scientific Research. She has held fellowships from NAS , Oak Ridge National Lab, and DAAD.

STUDENT AWARDS:

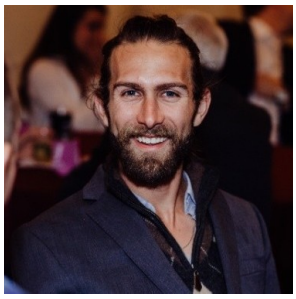
Kate Bubar and **Danielle Barna** received the Outstanding Graduating Senior Award. Mines' AMS department presented Outstanding Graduating Senior Awards to two students in recognition of their academic excellence and their service to the department, university and community.

Lindsey Nield and **Galen Vincent** shared both the 2018-2019 Ryan Sayers Memorial Scholarship and the Ryan Sayers Memorial Award.

John Corrette and **Delaina Moore** received the 2018-2019 E-days Award.

Tara Braden received the 2019 AMS Honors Fund to Honor Excellence in Teaching and Learning Award.

David Kozak received the 2019 Professor Willy Hereman Endowed Scholarship. This scholarship is presented to a student studying Applied Mathematics and Statistics who strives for excellence in scholarship, research and/or departmental involvement. The Scholarship was established by Dr. Douglas E. Baldwin, Mines BS '03, MS '04, in appreciation of Dr. Hereman's mentorship and inspiration.



Cooper Brown was the recipient of the 2019 Professor Everett Award in Mathematics. The Award is given to a senior who demonstrates scholarship, leadership, community service and potential for the innovative application of mathematics to mineral engineering.

AMS Graduate Teaching Fellow **Todd Yoder** is the 2019 recipient of the Graduate Teaching Award that is given annually to the graduate student who has shown the greatest effectiveness as a teacher of undergraduate mathematics or statistics courses.

Caitlyn Hannum was the 2019 recipient of the Graduate Research Award that is presented annually to a graduate

student for excellence in research prior to the completion of their PhD thesis, recognizing the research's original contribution to knowledge in the field and/or the student's exceptional collaboration with a research team.

Mines AWM Chapter Receives National Award

The Society for Women in Mathematics at Mines &– better known as SWiM – was honored for its professional development work by the *Association of Women in Mathematics*. SWiM, the Mines student chapter of AWM, is the 2019 recipient of the Association of Women in Mathematics' Professional Development Award.

AWM has more than 100 student chapters at universities across the U.S. and around the world. The organization recognizes those student chapters with four annual awards: for community outreach, fundraising, scientific excellence and professional development.

SWiM was recognized for "the breadth and success of its program to develop students' professional involvement in mathematics."

Advisors of the chapter are Applied Mathematics and Statistics Teaching Professor and Assistant Department Head **Debra Carney,** postdoctoral fellow **Areeba Ikram,** Associate Professor **Karin Leiderman** and Teaching Professor **Becky Swanson.** The 2018-2019 student officers were **Leah Reeder**, **Shannon Bride**, **Lindsey Nield** and **Jaquelyn Miller**

FACULTY AWARDS:

The Mines' AMS department is proud of their award-winning faculty and staff:

AMS Teaching Professor **Deb Carney** was selected as the winner of the 2018-2019 Mines Teaching Award–Teaching Faculty. Deb contributes to all aspects of academic life at Mines, but especially to our teaching mission. First and foremost, she is a dedicated teacher, who is highly appreciated by her students. Even more importantly, Deb constantly strives to improve upon what and how she teaches. She incorporates the latest insights of mathematics education researchers, and has contributed to the community herself both by presenting at regional and national conferences and by publishing a peer-reviewed journal article on her innovations for Linear Algebra.

AMS Professor **Dr. Bill Navidi** is statistics at Mines! Without him, the AMS Department probably would not feature the letter "S" in its acronym. Bill was the driving force in building the statistics program in the first place. He led the design of the curricula (for BS, MS, and PhD degrees), developed many of the courses, and has taught almost all of them. Bill's student course evaluations are excellent—students like the fact that he is enthusiastic, very direct and to the point in his instruction. Students also find his classes very engaging and humorous.

Dr. Mike Nicholas was named Outstanding AMS Faculty by the Mines' Class of 2019 Graduating Seniors.

FACULTY PROMOTION:

Two members of the Mines Applied Mathematics and Statistics Department were promoted this past spring:

- **Cecilia Diniz Behn** received tenure and was promoted to Associate Professor.

- **Karin Leiderman Greg**g received tenure and was promoted to Associate Professor.

FACULTY GRANTS

- **Cecilia Diniz Behn:** NSF "Collaborative Research: Nonsmooth maps, coupled oscillators and seasonal variation of sleep and circadian rhythms"
- **Mahadevan Ganesh**: Applied Research Associates, Inc, "Advanced High Fidelity Models & Methodologies"
- **Karin Leiderman**: NSF "CAREER: Mathematical Modeling to Identify New Regulatory Mechanisms of Blood Clotting"
- **Doug Nychka**: NSF "Collaborative Research: Modernizing Water and Wastewater Treatment through Data Science & Research (MoWaTER)
- **Steven Pankavich** and **David Benson**: NSF "Novel Computational Methods for Imperfectly-Mixed Chemical Reactions"

Other News:

AMS Department Participates in New Master's Degree in Data Science

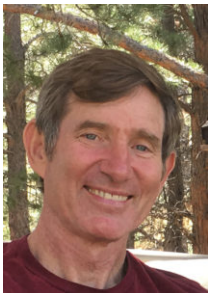
A new interdisciplinary non-thesis master's degree at Colorado School of Mines will prepare scientists, engineers, economists and more to harness the torrent of large and complex digital data that has become ubiquitous throughout society.

Launching this fall, the Data Science graduate program at Mines will address the unique needs of data-driven discovery and data-supported decision making, offering rigorous training in computer science and statistics while also giving students the space to develop a focused area of application based on their individual interests and career goals.

The data science graduate program is targeted toward both recent bachelor degree graduates looking to expand their knowledge base and employment opportunities, as well as working professionals who have recognized the need for data science skills in their current or future careers. For more information, go to datascience.mines.edu.

AMS Collaborators Receive "Honorable Mention for Best Paper in Geophysics"

Congrats to **Vaughn Ball** and **Luis Tenorio**! Their paper, "Three-term amplitude variation with offset projections," received an "Honorable Mention for Best Paper in Geophysics Award" from the Society of Exploration Geophysicists (SEG) for the year 2018.



Metropolitan State University of Denver

MSU Denver welcomes a new mathematics tenure-track professor, Dr. **Rob Niemeyer**. Dr. Niemeyer's research interests reside in the intersection of fractal geometry and mathematical billiards. Recent projects have allowed him to branch out into number theory and physically-inspired billiard problems. Dr. Niemeyer received his PhD from the University of California, Riverside under the supervision of M. L. Lapidus, and was an NSF MCTP Postdoctoral Fellow at the University of New Mexico.

In addition, the math department is recognizing their outstanding graduating seniors: **Brittany Bianco** and **Elizabeth Foster**, who presented their research results at the Nebraska Conference For Undergraduate Women in Mathematics in Jan 2019, at the Pikes Peak Meeting in March 2019, and at MathFest in July 2019. Finally, we would like to applaud our alumni, **Kempton Albee**, **Mike Barnes**, **Aaron Parker**, and **Eric Roon** — whose research results paper, supervised by **Dr. A. Schaeffer-Fry**, were published in *Involve: A Journal Of Mathematics*.

University of Northern Colorado

Our Math Club will host another Celebration of Mind event. It will be on Wednesday October 23 with a special guest lecture by Dr. Heather Russell titled ""A Graph Coloring Reconfiguration Problem" from 5 to 6pm, followed by mathematical games and puzzles, all open to the general public. You can find more information about the event at http://math.unco.edu/celebration-of-mind.aspx

Dr. **Hortensia Soto** received an NSF funding for a 2.5-day workshop. This workshop, EMIC Professional Development for Undergraduate Mathematics Instructors (EMIC-PD-4UMI), will be open to 50 collegiate faculty, including graduate students, and will be on June 8-10, 2020.

This workshop will weave ideas from the recently published Mathematical Association of America Instructional Practices Guide which addresses classroom, assessment, and design practices. As such, we will have keynote speakers who address EMIC and classroom practices, EMIC and assessment practices, and EMIC and design practices. For more information visit https://www.embodiedmathematics.com/ , or contact the PI, Hortensia Soto.

We will continue our Math Contest this year. First round will be administered in schools around the state in late October. Please share this information and the website is: https://uncmathcontest.wordpress.com/.

Dr. **Lindsay Reiten** was accepted to be one of the the AMTE STaR fellows. Drs. **Katie Morrison** and **Gulden Karakok** are now serving on the editorial board of a new journal: *Journal of Math Circles*: https://digitalcommons.cwu.edu/mathcirclesjournal/

We are excited to announce that two of our doctoral students successfully defended their dissertation recently. Dr. **Rob Powers** was the advisor of Dr. **Michelle Morgan** and Dr. **Elizabeth Scott-Janda**. Dr. Morgan is an assistant professor at Western Colorado University and Dr. Scott-Janda is working at a high school in Colorado.

Pikes Peak Community College

Pikes Peak Community College (PPCC) Mathematics has been busy this last semester as a dedicated team of 14 full time faculty developed and is now piloting a co-requisite model for four courses. These courses, MAT 135 (Statistics), MAT 107 (Career Math), MAT 120 (Math for the Liberal Arts) and MAT 103 (Math for Clinical Calculations) are all courses that require the proficiency of MAT 050 (Quantitative Literacy) but are frequently stumbling blocks to students' degree programs. This "just in time" approach, coupling an intensive, three hour course in addition to the regular course meetings, has a documented history in increasing success rates for the more mathematically challenged students. We anticipate similar success.

Under an NSF grant, PPCC is supporting a STEM Core initiative, providing an accelerated pathway and intensive support for developmental students desiring STEM majors. This program couples MAT 055 (Algebraic Literacy) and 121 (College Algebra) in a single semester, with the goal of having students internship and Calculus ready at the end of one year. They plan to pilot this accelerated combination in Fall 2020.

Following the lead of Red Rocks Community College and the Community College of Denver, PPCC is exploring using Open Educational Resource (OER) text books coupled with the MAA WebWork online homework system. The goal is to develop MAT 121 and MAT 122 (Trigonometry) using OER,

both online and face- to-face, in the spring with pilot courses starting in summer.

Also very exciting is the consolidation of the two former math departments, College Prep Math and College Level Math, into a single department. We anticipate significant synergy with this new, joint department.

Is news from your school missing?
Send your news to your department liaison now with a request to forward it to the Newsletter Editor, Pam Peters, for inclusion in the next issue.
pam.peters@ppcc.edu

CCTM News

The Colorado Council of Teachers of Mathematics is working to reshape of its annual conference and professional development work for both in-service and pre-service teachers of mathematics. The board members will hold events at various school districts across Colorado to listen its existing members' and others'' ideas and expectations from CCTM. We believe learning from our communities need, we could create better targeted future events. The list of events and dates will be shared on the CCTM website. We encourage you to check the dates, share them with in-service and pre-service teachers and attend them to provide your input: https://www.cctmath.org/.

The *Colorado Math Teacher Journal* is accepting submission of manuscript proposal. Finished CMT articles should be between 800-1200 words, including titles, tables, figures, and references. Authors should write for a broad audience of people invested in mathematics education. For information about the submission process, visit https://www.cctmath.org/cmt-submit/.

Gulden Karakok,
UNCO CCTM Rep

17th Annual Pikes Peak Regional Undergraduate Mathematics Conference
Colorado State University - Pueblo
Saturday, February 22, 2020

Mark your calendars now for the next PPRUMC, to be held on the penultimate Saturday in February. The focus of this one-day conference is to give undergraduate mathematics students an opportunity to present their work in a professional, supportive setting. It is also an occasion for students to become acquainted with other students from the region, and to learn more about the mathematics profession, including graduate school and career opportunities.

The conference program will feature talks by students, a keynote speaker, and a panel discussion on careers and graduate school. Based on recent attendance, we expect several dozen student presenters and over one hundred attendees from Colorado, Wyoming and other neighboring states.

Please begin now to encourage your students both to attend and to make a presentation! Presentation topics could include the results of classroom or independent study, as well as REU or other research projects. Both research and expository topics related to mathematics, history of mathematics or mathematics are welcome. Each student presenter will give a 20-minute talk. **The deadline for submitting an abstract will be approximately February 1, 2020.**

Pending the success of our funding efforts, there will again no registration or lunch fees for the conference; financial reimbursement for student travel expenses may also be available. **If you have suggestions regarding potential financial contributors—or if you would like to personally make a donation in support of PPRUMC—please contact PPRUMC Steering Committee member** janet.barnett@csupueblo.edu . General questions about the conference can also be directed to Janet.

SIAM 16th Annual Front Range Applied Mathematics Conference
University of Colorado – Denver
March 7, 2020

The SIAM student chapters of Colorado host the annual SIAM Front Range Student Conference in Applied Math (FRAMSC). The conference is usually held the first Saturday in March on the CU Denver campus. This event allows students, at both the undergraduate and graduate level, to learn about research being done locally and to promote interest in applied mathematics in general. This year's conference will be our sixteenth and will be held March 7, 2020. Additional information, as it becomes available, will be posted here.

All of the talks, except for the keynote address, are given by students. Generally, there are about 30 twenty-minute talks with several parallel sessions. We also have a special session for students to present their solutions to the Mathematical

Contest in Modeling problems. A nominal donation is requested to help defray the costs of the refreshments and lunch.

Unfortunately, we are not able to announce the keynote speaker at this time. Please let me know if you need any additional information. If you want, you can find information on last year's conference here.

Anne Dougherty,
University of Colorado

The 2020 Rocky Mountain Section Meeting
April 17–18, 2020

METROPOLITA
STATE UNIVERS
OF DENVER

The 2020 Rocky Mountain Section meeting will be held April 17–18, 2020 on the campus of Metropolitan State University of Denver, Denver, CO. The meeting promises two days of engaging speakers, student activities, book sales, and more. More info to follow.

Plenary speakers include:

MAA National Speaker:	Dr. Carol Schumacher	Kenyon College
Polya Lecturer:	Dr. Kristin Lauter	Microsoft Research Redmond Labs
2019 Burton W. Jones DTA Recipient:	Travis Kowalski	SDSMT
2019 ECTA Recipient:	Kenneth M. Monks	FRCC, Boulder Campus

We invite proposals for contributed paper sessions and panels. In particular, the organizers welcome proposals aimed at undergraduates, such as REU or undergraduate research, careers for bachelor's in mathematics, graduate school advice, or similar topics. All proposals should be submitted by **February 29th, 2020** to one of the Program Co-Chairs:

Dr. Mona Mocanasu	mmocanas@msudenver.edu
Dr. John Ethier	jethier@msudenver.edu
Dr. Lindsay Packer	lpacker@msudenver.edu

TRIUMPHS

RMS Members invited to join TRIUMPHS in
studying the masters to stimulate student learning and transform your teaching

It appears to me that if one wishes to make progress in mathematics, one should study the masters and not the pupils.

Niels Abel (1802 – 1829), as quoted in O Ore, "Niels Abel, Mathematician Extraordinary"

The *Transforming Instruction in Undergraduate Mathematics via Primary Historical Sources* (TRIUMPHS) grant is now entering its fifth (and final?) year. A national, seven-university NSF-funded collaboration, TRIUMPHS collection of freely-available curricular materials now includes 34 full-length "Primary Source Projects" (PSPs) and 33 shorter "mini-PSPs" on core topics in courses ranging from pre-calculus and introductory statistics, to linear algebra and number theory, to abstract algebra, analysis and topology. At the heart of the PSP approach lies the original writings of masters such as Euler, Lagrange, Cauchy, and even Abel himself. Students read select excerpts from these mathematical works, and through a series of exercises that are woven throughout the project, develop a fuller understanding of the mathematics in question as they react to the historical source, organize their thoughts about the mathematical ideas in it, and rediscover groundbreaking ideas for themselves. Along the way, students also engage directly in activities that mirror how mathematicians work: making sense of and interpreting ideas, stating conjectures and testing them, developing definitions and proving theorems.

TRIUMPHS PSPs are also being widely site-tested by instructors across the US, with the Rocky Mountain Section leading the way among MAA sections in terms of the number of faculty who have taught with a PSP! Included among those who are part of TRIUMPHS site-testing effort to date are **Stephanie Beck** (FRCC-Boulder), **Ed Bonan-Hamada** (Mesa), **John Carter** (MSU Denver), **Christy Gomez** (FRCC-Boulder), **Lynne Ipiña** (UW), **Mark Koester** (MSU Denver), **Bruce Lundberg** (CSU- Pueblo), **Jeremy Muskat** (Western), **Laura Scull** (Fort Lewis) and **Qin Yang** (MSU Denver) — and many of these individuals have begun sharing their PSP classroom experiences through conference talks as well. PSP authors **Carl Lienert** (Fort Lewis), **Ken Monks** (FRCC-Boulder) and **Dave Ruch** (MSU Denver) have also contributed over a dozen excellent projects to the TRIUMPHS collections, and two of the project's PIs — **Janet Barnett** (CSU-Pueblo) and **Diana White** (CU Denver) — reside in our section.

RMS members interested in learning more about TRIUMPHS certainly don't have far to go and **there's still time for you to join the TRIUMPHS site-tester cadre!**

To get started on your own TRIUMPHS journey, please contact Janet Barnett or Diana White, or visit the TRIUMPHS website. Support for official site testers 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. The **site tester application deadline for Spring 2020 is October 15, 2019**.

Section NExT – RM

Call for Participants for 2020 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 17-18, 2020 at Metro State University in Denver. The Section NExT-RM sessions will occur both just prior to and just following the annual section meeting, beginning at noon on the 17th and ending by 5pm on the 18th. 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 2020 and Spring 2021 Rocky Mountain MAA Section meetings. In particular, they will take part in the planning of some of the 2021 Section NExT-RM sessions.

Does this cost me anything?

Section NExT-RM is a selective professional development program—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://forms.gle/2w2r1d6vGmZMg7Vp7 by March 1st, 2020:

- 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 will be 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 can be submitted to aschaef6@msudenver.edu.

Questions? Contact the Section NExT-RM Coordinators Mandi Schaeffer Fry, MSU–Denver, or Rebecca Swanson, Colorado School of Mines.

Student Activities

Student Activities

Jeopardy Winners! Congratulations to the first place team, Colorado College "Team Newton", and to runner-up USAFA, who competed admirably against a strong field in the 2019 Jeopardy competition at Fort Lewis College last April.

Winning team from Colorado College

Runner-up from the Air Force Academy

Students and Advisors:

Attending the section meeting is a great way to meet students from other schools, attend talks where you may learn some new and interesting mathematics, and present the results of your own research. Start thinking now about a presentation topic for the April 2020 conference.

2019 Business Meeting Minutes

Minutes: MAA Rocky Mountain Section Business Meeting
Date & Time: Saturday, April 6, 2019, 12:00 – 1:00pm
Location: San Juan Dining Hall, Fort Lewis College
Attendance: **~25 in attendance**

Alexander Hulpke starts the meeting at 12:04

1. Minutes: by acclamation, minutes are approved unanimously
2. Report from nominating committee for chair elect — (none are present), so no report
3. **Alexander Hulpke**: note that this year we are switching to an electronic vote, instead of the election at the business meeting. Look for the email on April 12 th , ballots close on May 3 rd . If anyone likes to propose a further candidate — this can be done at the meeting today. Short presentation of the two nominated candidates for Chair Elect.
4. **Dan Swenson** (Black Hills State Univ): small presentation of himself — this is his 10^{th} year at BHSU, and his 10 th MAA-RMS meeting. I am sure there is a lot I don't know about the section, but I am happy to serve it you think this is a good idea.
5. **Jonathan Poritz** (CSU Pueblo) — short intro of himself. He is the Director of Teaching and Learning at CSU Pueblo — so he is not as much in the classroom as before, and therefore he has time to dedicate to the section.
6. No other nominations are made by the people present
7. **Mona Mocanasu:** financial report (see attached). All seems to be fine, and last year we were overall in the blank (we made about the same money as we spent).
8. **Alexander**: please submit more grant requests.
9. **Beth Schaubroeck** — student activities report — thank you for supporting the students, and please continue to do so. We need a new student activities organizer —encourage your colleagues to apply. To be followed-up in some form, so this announcement gets to more section members.
10. **Alexander** — chair report:
    a. we have had a large turn-over of section officers due to some people moving (unplanned turn-over for secretary/treasurer, editor, national rep). We have new section by-laws and new procedures, and the process was not as smooth as we would have liked. If there are problems, please let us know.
    b. We had to reschedule the meeting due to an unexpected scheduling conflict. Due to location, we had to change the schedule, including this business meeting. These ad-hoc decisions were for this year only — let us know if you want to keep some of them.
    c. Thanks are due to: Mike Jacobson (finishing his 4-years term as chair elect/chair/chair). Also, thanks to Linda Sundbye, for 15 years of section newsletter editor. Thanks to Mandi Schaeffer-Fry and Becky Swanson for their work on the Project NeXT activities
    d. Pam Petters is nominated as new section newsletter editor.
    e. We invite people to nominate colleagues (or self-nominate) for the officer positions for the section.
11. **Debra Carney**: national representative report:
    a. Transition from old to new structure. We have now 7 learning communities.
    b. Request for mentorship facilitator — pair senior with junior faculty. Any nominees?
12. **Rachael Levy** — MAA Deputy Executive Director — connecting between meetings — for future use plan to switch to MAA connect (a new platform) — to help sections stay connected and interact (to be launched at MathFest this year) To beta-test email Cheryl Adams at headquarters.
13. **Question about the transition away from JMM** — what should we expect? Answer from Rachel Levy: we are looking for member input on this transition; a new strategic plan will be

presented at the next MathFest. MAA is planning to have a more inclusive Project NExT, and similarly a more inclusive Section NExT. Finally, we need to raise the level of mathematical content at MathFest.

14. **Mike Jacobson:** Announcement of the teaching awards: early-career teaching award is awarded in 2019 to Kenneth M. Monks (Front Range Community College, Boulder Campus) and the Burton Jones Award is awarded to Travis Kowalski (South Dakota School of Mines). People are encouraged to nominate for future year.
15. Upcoming meetings announcement: CCTM, MathFest, JMM, 2020 Sectional Meeting at MSU Denver
16. **Janet Barnet** — follow-up of a discussion from last year, to create a program coordinator for all future section meetings. Have it as a 3-year rotating position, Shawna mentions that this can be done by the vice-chair. **George Heine**: it would be nice to have someone on a permanent position. **Rachel Levy**: national may be able to help with things like registration ...
17. **Lisa Driskell** (CMU) — Chair of Early Career Mathematicians — pairs new junior faculty with mentors... they host PosterFest at MathFest
18. **Colorado Math Awards** — good news, CO had 3 students in top 100 at the Putnam.

19. Thank to current host — Fort Lewis College

2019 Officers Meeting Minutes

Minutes:	MAA Rocky Mountain Officers Meeting
Date & Time:	Saturday, April 6, 2019, 7:30 – 9:00pm
Location:	Himalayan Kitchen, Durango CO
Attendance:	Alexander Hulpke, Laura Scull, Debra Carney, Rachel Levy, Michael Jacobson, Mona Mocanasu, Lindsay Parker

Alexander Hulpke starts the meeting at 7:30pm

1. **Last meeting minutes**: minutes are approved unanimously.
2. **Financial report**: at present the section has a reasonable budget, so it would be beneficial to invite more activity grants. In particular, the section may consider offering travel support for students (undergraduate and graduate?) in the MAA RMS section. The conclusion was to form a committee that would review student proposals for travel grants.
3. **Member Communication**: it seems that a better form of communication would benefit the section. For example, MAA RMS has 52 institutions, but there are less than 20 schools represented at the 2019 regional meeting. The resolution for this was to check at a later date the participation report for the 2019 meeting.
4. **New bylaws/procedural manual**: has been updated and approved (and is available on the website at http://sections.maa.org/rockymt/SectionProceduresHandbook.pdf)
5. **Regional Meeting Coordinator**: rather than having a meeting coordinator, the consensus is to build a detailed task list instead.
6. **2020 Regional Meeting**: preliminary details discussed, including inviting a national officer to the meeting, and the Polya speaker.
7. **Suggestion for future regional meetings**: in years where MAA National does not pay for a Polya speaker, we should invite a local, mid-career speaker to give a talk. Either we can find a local industry sponsor (maybe Google, with their new office in CO) — or the section will find the resources to pay a reasonable speaker fee.
8. **Further discussion** for future regional meetings: our region has several institutions that are far away from the Front Range corridor; if the meeting is hosted by a far-away institution, how would this impact attendance?

Meeting Adjourned at 9:00PM.

Financial Report

MATHEMATICAL ASSOCIATION OF AMERICA Section Financial Report - Year Ended 12/31/2018

SECTION: Rocky Mountain Section

(A) BEGINNING BANK BALANCE(S), 12/31/2017	10,230.26 (see note below)	
(B) REVENUES		
B.1 MAA Subvention	605.89	
B.2 Project NExT		
B.3 Meeting - Registrations		
B.4 Meeting Income	7,845.62	
B.5 Workshop Registrations		
B.6 Meeting Exhibitors		
B.7 Contributors		

B.8 Interest on Checking	
B.9 Interest Savings/CD	16.34
B.10 Book Sales	293.10
B.11 Dues	
B.12 Advertisements	
B.13 Institute Memberships	
B.14 PPRUMC fund (restricted)	156.90
B.15 _____ Other	107.28
(B) TOTAL REVENUES	9,025.13
(C) EXPENSES	
C.1 Secretarial	0.00
C.2 Honoraria	
C.3 Postage	
C.4 Telephone	
C.5 Printing	
C.6 Newsletters	
C.7 Travel	
C.8 Meeting Expenses	7,018.77
C.9 Speakers Travel/Lodging	
C.10 Students Lecture Program	
C.11 Book Sale	
C.12 Project NExT	
C.13 Awards	543.66
C.14 Miscellaneous Office	
C.15 Activity Grant: Colorado Mathematics Awards	
C.16 Activity Grant UNCO	750.00
C.17 Activity Grant PPRUMCa	1,000.00
C.18 Books for door prizes	
C.19 Jeopardy buzzer system	
C.20 PPRUMC	
(C) TOTAL EXPENSES	9,312.43
(D) ENDING BANK BALANCE, 12/31/2018	9,942.96
(A + B - C = D)	

Mocanasu MAA-RMS Secretary, Treasurer 8/15/19

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.

Grants Available

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

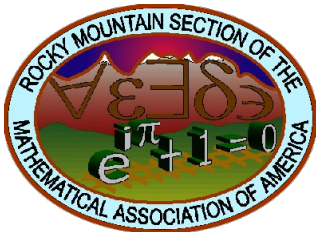
The establishment of a Student Recognition Grant Program was approved by the section membership at the 2003 Annual Business Meeting. In support of this program, the Section will set aside $500 every calendar year. From these monies, the Section will make grants for the purpose of recognizing superior 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 Sectionâ€™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

2020:	Jan. 15–18	**Joint Mathematics Meetings**	**Denver, CO**
	April 1–4	NCTM Centenial Meeting	Chicago, IL
	July 29–Aug 1	MAA Math Fest	Philadelphia, PA
	Oct. 21–24	NCTM Annual Meeting	St. Lous, MO
2021:	Jan. 6–9	Joint Mathematics Meetings	Washington, DC
	Aug. 4–7	MAA MathFest	Sacramento, CA
	Sept. 22–25	NCTM Annual Meeting	Atlanta, GA
2022	Jan. 5–8	Joint Mathematics Meetings	Seattle, WA
	Aug. 3–6	MAA Math Fest	Washington, DC
2023	Jan. 4–7	Joint Mathematics Meetings	Boston, MA
	Aug. 2–5	MAA Math Fest	Tampa, Fl

Burton W. Jones Award Nomination Form

Nomination guidelines and a link to the nomination form are available on the Section Website.

Early Career Teaching Award Nomination Form

Nomination guidelines and a link to the nomination form are available on the Section Website.

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.

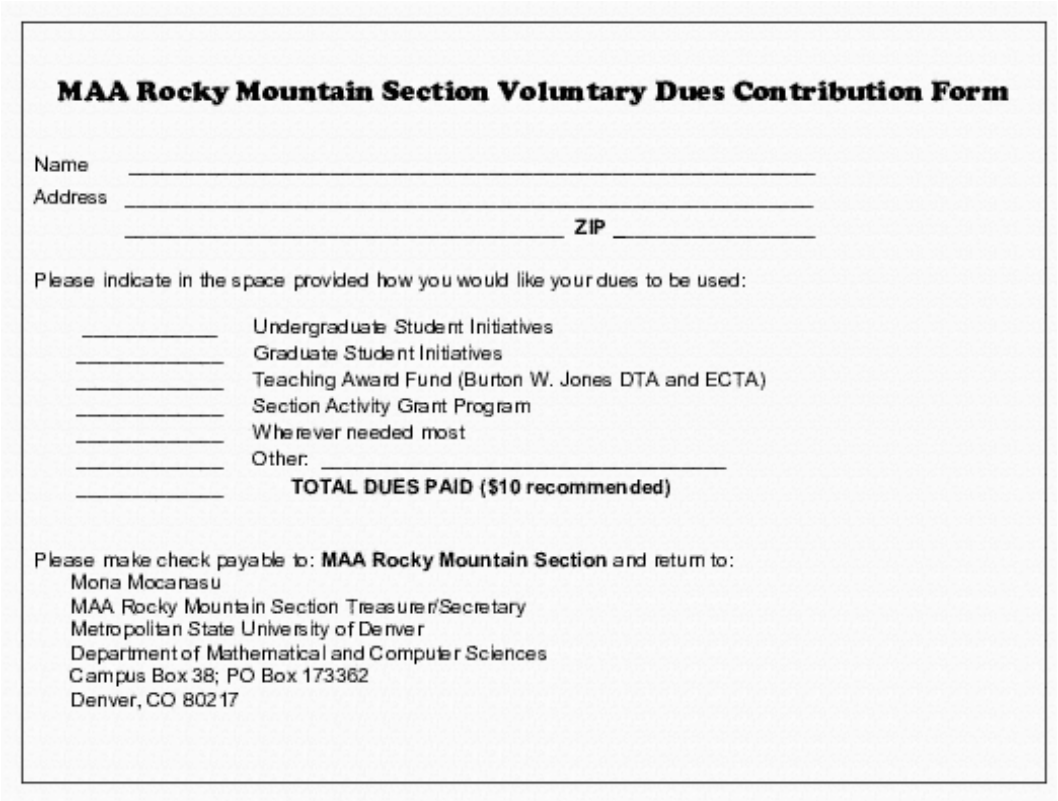
Contributions may also be made in support of the Pikes Peak Regional Undergraduate Mathematics Conference; simply choose "Other" on the coupon below, and specify "PPRUMC" in the space provided. A voluntary section dues contribution from you now can help build up funds in support of similar initiatives!

A Voluntary Dues Contribution Form is also available on the Section Website in docx, odt, or pdf formats. Complete and send with your contribution to the Section Treasurer/Secretary:

Spencer Bagley
University of Northern Colorado
School of Mathematical Sciences
510 20th St., Campus Box 122
Greeley, C0 80639

spencer.bagley@unco.edu

MAA Rocky Mountain Section Voluntary Dues Contribution Form



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:
Mona Mocanasu
MAA Rocky Mountain Section Treasurer/Secretary
Metropolitan State University of Denver
Department of Mathematical and Computer Sciences
Campus Box 38; PO Box 173362
Denver, CO 80217

MAA Rocky Mountain Section Mission Statement

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.