

Sample Special Paper Sessions, Titles and Descriptions¹ **RMS Annual Meeting**

College Algebra: Successes and Challenges²

This session invites talks related to the curriculum design and delivery of College Algebra courses, and related outcomes.

IBL Methods in the Classroom³

This session invites talks dedicated to inquiry-based methods and experiences, both in lower and upper division mathematics. Topics related to course preparation, student buy-in, grading solutions and subject coverage will be addressed. Additionally, presentations on non-traditional IBL courses – such as: large enrollment, fixed syllabi or introductory mathematics – are encouraged.

History of Mathematics and Its Use in Teaching⁴

This session invites talks on any topic related to the history of mathematics. Talks on the use of history in teaching undergraduate mathematics courses other than the history of mathematics are especially welcome.

Interesting Ideas in Mathematics⁵

Have you discovered some wonderful mathematical tidbit/idea/connection that you just can't resist sharing with others? In this session, you will have the opportunity to talk about any interesting mathematical result, not necessarily original, that is general enough to be accessible to the broader community of mathematics faculty.

Mathematics Education

This session is devoted to issues related to mathematics education, broadly defined to include theory-grounded research, the scholarship of teaching and learning, and research-based practices.

Mathematics in K-12 [or K-8] Teacher Preparation⁶

This session invites talks which discuss the challenges and rewards of preparing future teachers to teach mathematics in grades K – 12 [or K-8], including practical ideas for meeting these challenges.

¹ Compiled from prior meetings by Janet Barnett, janet.barnett@csupueblo.edu

² There are many possible variations on the “College Algebra” idea, based on particular courses or sets of courses.

³ There are again many possible variations on the “IBL Methods” theme that may be of interest to potential session organizers, such as “Open Education Resources” or “Hybrid Courses.”

⁴ This session (or some variation of it) has been organized by Janet Barnett (Colorado State University - Pueblo) & George Heine (Math and Maps) for many years now.

⁵ Depending on the interests of potential session organizers, an “Interesting Ideas” session has been offered based on some particular specialty area, such as “Interesting Ideas in Number Theory.” It is important for the meeting program to include at least one special session devoted to mathematics (versus teaching mathematics or mathematics education). There might be several such sessions, depending on the interests of the host institution and potential session organizers.

⁶ The natural variations on the “K-12 teachers” theme are to focus on some subset of K-12 teachers (e.g., K-8, elementary, secondary, middle school, high school).

Research by Graduate Students⁷

In this session, graduate students will present their research to faculty, other graduate students and undergraduates. Graduate students in pure mathematics, applied mathematics, and mathematics education are invited to participate. Presenters need not be near completion of his/her program.

Undergraduate Student Presentations⁸

Are you supervising a student research project? Encourage your student to present their results at the meeting! Students throughout the Rocky Mountain Section are encouraged to present in the areas of mathematics, mathematics education and the history of mathematics. Presentation topics could include the results of classroom or independent study, as well as REU or other research projects. Both research and expository topics are welcome.

General Session⁹

Talks on any mathematics related topic are welcome in the general session. Please submit your abstract to this session if it does not fit in one of the sessions above.

Other special session ideas from prior meetings, for which sample abstracts are not available:

- **Regional Math Experiences (BIG – Business Industry and Government)¹⁰**
- **Classroom Innovations¹¹**
- **K-16+ Challenges¹²**

⁷ For several years, the section financially supported a “Research by Graduate Students” session, by providing travel funding to one graduate student from each of the PhD granting universities in our section, where that individual was nominated to receive that support by the mathematics department at each institution. In recent years, there has been little or no response from the graduate programs at these schools in response to the invitation to nominate a recipient. Meeting organizers should contact the current Executive Committee to determine if they still wish to pursue this idea.

⁸ The “Undergraduate Paper” session is organized by Section Student Activity Coordinator.

⁹ In setting up the final program, general submissions might be organized into separate sessions by ‘General Teaching’ and ‘General Mathematics,’ depending on how many submissions of each type are received. However, the abstract submission form does not need to go into that much detail]

¹⁰ The Regional BIG session was organized by a member of MAA’s BIG SIGMAA. Regional members of other MAA SIGMAA groups might also have an interest in organizing a session tied to their special interest; a full list of these is available at <https://www.maa.org/programs-and-communities/member-communities/sigmaas>, although the essential point is to have someone from RMS who has a particular interest in making a related session happen.

¹¹ The idea of “innovations” might also be narrowed to particular mathematical process, such as “Innovations in Teaching Modelling” or “Innovations in Teaching Proof.”

¹² A session that brings K-12 and higher ed teachers together might also be focused on some particular issue of shared interest, such as assessment. In some years, COLMATYC or CCTM has also participated in our section meetings, either through a Round Table organized by their members, a cross-association panel discussion or even by holding a Business Meeting of their association during the section meeting dates.

Some General Publicity/Recruitment Notes for Meeting Organizers

- Ideas for special sessions should be solicited from the Section membership, in addition to any such ideas related to a meeting theme that has been set by the host institution.
- Meeting organizers may also wish to reach out to junior members of the RMS with an invitation to either submit a special session proposal of their own, or to serve as a special session organizer on a topic that the organizers wish to see included in the program.
- In addition to the title and description of each session, the meeting website should list the names of session organizer and an email address for at least one organizer of each session.
- Session organizers should take the lead in encouraging speaker submissions related to the session theme, in addition to arranging the schedule of talks within their session (based on a general schedule template provided by the meeting organizers).
- Google forms have become a standard way to handle abstract submission, since it is easy to provide access to all submissions by both the general meeting organizers and the organizer of each special session, via the response spreadsheet for the form.
 - A sample form can be viewed at <https://forms.gle/qZJZ1n37ZLDjIKrv5>
 - The associated response spreadsheet can be found at https://drive.google.com/open?id=1JVOafOHHPJazbOwn8Ubry_lwiNwitKc5yfiYwrVbOU

To obtain an editable copy of this form that can be tailored to fit a particular meeting, please contact janet.barnett@csupueblo.edu .