

MAA COMMITTEE ON COMPUTERS IN MATHEMATICS EDUCATION

TUESDAY, 8-JAN-2002

1:00 PM - 3:00 PM

Torrance Room, South Tower, Level 4

Marriott Hotel, SAN DIEGO, CA

AGENDA

- I. **Call to Order**
- II. **Attendance**
- III. **Review of the Minutes** of the last meeting.
- IV. **Activities at the current meeting**

- a. **CPS: Title: Computational Mathematics in Linear Algebra and Differential Equations**

- Sunday and Monday Afternoons

- Description: Recent advances in computer algebra systems, spreadsheets and calculators facilitate numerical investigations of many meaningful problems in Linear Algebra and Differential Equations. Such investigations often lead to better students' understanding of mathematical concepts while empowering them with the capabilities to analyze more "real world" problems. This session invites papers from these disciplines where these technologies are utilized.

- Organized by:

- Elias Deeba, University of Houston-Downtown, Houston, Texas

- Rich Marchand, SUNY, Fredonia, New York

- Tim McDevitt, Millersville University, Pennsylvania

- b. **CPS: Innovative Uses of the World Wide Web in Teaching Mathematics**

- Sunday and Monday Mornings

- This contributed paper session will focus on creative uses of the World Wide Web in mathematics instruction. Proposals are solicited on original uses of Web resources in the classroom. We are looking for presentations involving the use of real data sets, instructional materials, interactive simulations, video conferencing, or other topics of interest for educators who are currently using, or planning to use, the Web in their classes. The session is sponsored by The MAA Committee on Computers in Mathematics Education (CCIME).

- Organized by:

- Marcelle Bessman, Jacksonville University

- Brian Smith, McGill University

- Marcia Birken, Rochester Institute of Technology

- Lawrence S. Husch, University of Tennessee, Knoxville

**V. Activities planned for the MathFest 2002, Burlington, VT**  
**a. MAA CPS A1 Creative Use of Technology in Teaching Mathematics**  
Thursday afternoon

This session will focus on innovative uses of technology to support and enhance the learning of mathematics in all college courses. In particular, we are interested in the use of technology to support conceptual understanding and appreciation of the application of mathematical principles to solving real world problems. The session is sponsored by the MAA Committee on Computers in Mathematics Education (CCIME).

Mary L. Platt (\*)  
Department of Mathematics  
Salem State College  
Salem MA 01970  
Phone: (978) 542-6928  
Fax: (978) 740-7175  
E-Mail: [mplatt@salemstate.edu](mailto:mplatt@salemstate.edu)

Marcelle Bessman  
Jacksonville University

**b. MAA CP B1 E-Learning Mathematics Courses**  
Thursday afternoon

This session invites papers that describe e-learning mathematics courses. Papers that deal with methods of design, implementation, delivery, assessment and maintenance of complete e-learning environments, as well as experiences implementing such courses are welcome. This session is sponsored by the Committee on Computers in Mathematics Education (CCIME).

Elias Deeba (\*)  
Department of Computer and Math Sciences  
University of Houston-Downtown  
One Main Street  
Houston, Texas 77002  
Tel: (713) 221-8550  
Fax: (713) 745-3505  
E-Mail: [Deebae@dt.uh.edu](mailto:Deebae@dt.uh.edu)

Ananda Gunawardena, Department of Computer Science, Carnegie-Mellon University

**VI. Discussion and Approval of proposals for Joint Meetings 2003, Baltimore, MD**

- a. CPS: Proposal Title: **Mathlets for Teaching and Learning Mathematics** (Abstract is attached at the end of the Agenda)
- b. CPS: Elias Deeba, Drs. Marchand and McDevitt propose the possibility of having a similar session with same title as the San Diego Meeting, "Computational Mathematics in Linear Algebra and Differential Equations"

VII. Preliminary discussion of proposals for MathFest 2003

VIII. Math DL/JOMA

IX. SIGMA

X. Other

XI. Adjourn

---

## **XII. David M. Strong**

---

Department of Mathematics • Pepperdine University • (310) 506-6069

[David.Strong@pepperdine.edu](mailto:David.Strong@pepperdine.edu)

Howard L. Penn  
Department of Mathematics  
U.S. Naval Academy  
Annapolis, MD 21402  
[hlp@usna.edu](mailto:hlp@usna.edu)

December 21, 2001

Dear Dr. Penn and MAA Committee on Sessions of Contributed Papers:

We wish to organize a contributed paper session for the 2003 Baltimore Joint Mathematics Meetings.

Proposal Title: **Mathlets for Teaching and Learning Mathematics**

Organizers: David Strong  
Department of Mathematics  
Pepperdine University  
24255 Pacific Coast Highway  
Malibu, CA 90263  
(310) 506-6069  
[David.Strong@pepperdine.edu](mailto:David.Strong@pepperdine.edu)

Joe Yanik  
Department of Mathematics and Computer Science  
Emporia State University  
Emporia, KS 66801

(620) 341-5639  
[yanikjoe@emporia.edu](mailto:yanikjoe@emporia.edu)

Tom Leathrum  
Department of Mathematics, Computing, and Information Science  
Jacksonville State University  
Jacksonville, AL 36265  
(256) 782-5827  
[leathrum@jsucc.jsu.edu](mailto:leathrum@jsucc.jsu.edu)

Our proposal is summarized on the following page.

## Summary of Proposal for *Mathlets for Teaching and Learning Mathematics*

Tom Roby, the editor for the Mathlets section of the Journal of Online Mathematics and Its Applications (JOMA) has described a Mathlet as a “small interactive platform-independent tool for teaching math.” Currently, most Mathlets are Java applets. We would like to organize a contributed paper session on Mathlets for the 2003 Baltimore Joint Mathematics Meetings.

Mathlets can be very useful tools for the teaching of mathematics. Among their advantages:

- They allow students to experiment with and visualize a variety of mathematical concepts.
- Most of them are free and accessible to students.
- They can be custom-designed by a professor or a department to a specific course.
- They can be easily shared by mathematics instructors across the world.

In past meetings there have been sessions that have dealt with using the World Wide Web or technology in general in teaching mathematics. While these have been very useful, we feel that it is now appropriate to hold a session that focuses specifically on Mathlets for a number of reasons, including:

- As described above, Mathlets are very useful in teaching and learning mathematics.
- There have been meetings held the past three summers (including 2002) that have focused on the use of Java to create Mathlets. The response to these meetings has been very positive.
- A section of JOMA is devoted to Mathlets.
- We would like to allow those who are working on Mathlets to exchange ideas to avoid a duplication of efforts.
- We would like to encourage others to begin working on Mathlets.

We, personally, would like to organize the session because:

- We are extremely interested in the creation and the dissemination of more and better Mathlets.
- We have all written Mathlets and we have used them in our mathematics courses.
- We interact with and are in contact with others who write and use Mathlets.
- We have been involved in (both organizing and participating in) prior Mathlet meetings.