ROCKY MOUNTAIN SECTION OF THE MATHEMATICAL ASSOCIATION OF AMERICA Officers for 1993-1994

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### SPRING MEETING of ROCKY MOUNTAIN SECTION

South Dakota School of Mines and Technology, Rapid City, South Dakota April 15-16, 1994

Chairperson's Report – (to be filled is from Kelley)

This year's Section nominating committee consists of:
Frieda Holley, Metropolitan State College, 830 Columbia Pl. Boulder, CO 80303 [(303) 556-2655]
Carl Kerns, Mesa State College, Grand Junction, CO 81502 [(303) 241-5321]
(one additional person to be appointed by the Section Chair)

For this meeting the committee needs to nominate a Chair-Elect. Please feel free to convey recommendations to the committee.

Secretary-Treasurer's Report

## Rocky Mountain Section Report-1993 Meeting

The annual meeting of the Rocky Mountain Section was held April 2-3, 1993, on the campus of the Colorado School of Mines in Golden. The program co-chairs were Ardel J. Boes and Willy A. Hereman. There were approximately 140 registrants.

The keynote address was "Technology in mathematics instruction" by John W. Kenelly of the MAA. Dr. Kenelly also gave the banquent address: "New Moves in Assessment and Educational Accountability."

The program consisted of the following:

Panels on: Use of Technology and Cooperative Projects in the Classroom

Mathematica in math courses: Student perspectives

Workshop: Workshop on Interactive Mathematica Texts

William Emerson, Metropolitan State College of Denver

Special session in honor of John H. Hodges of the University of Colorado,

organized by A. Duane Porter of the University of Wyoming

### Contributed talks.

If "Matrix" means "Womb", Who is the Baby? And Who is the Father?

Janet H. Barrett, University of Southern Colorado

Calculus with Mathematica at Colorado School of Mines, Barbara Bath and Frank Hagin, Colorado School of Mines

The Driven Pendulum: Theory, Practice and Implications for Control,

Elizabeth Bradley, University of Colorado, Boulder

The Good Bug Problem, David Carlson, Colorado Department of Agriculture

A Development of a Polynomial ADT, Jose Cisneros, Metropolitan State College of Denver

A Comprehensive Game Plan for Calculus Reform. Are we close yet?

Carl Crockett, United States Air Force Academy

The Differential and Matrix Groups, W. Harold Davenport, Mesa State College

The Mathematics of Optics, as Viewed by René Descartes,

Nicolas De Toustain, University of Colorado, Boulder

Computer Simulation-A Capstone Course for Math Majors,

George S. Donavan, Metropolitan State College of Denver

A Case Study Course in Mathematics for Non-science Students.

William S. Dorn and James L. LaVita, University of Denver

A Ring of Lebesque Integrable Functions, Donald P. Elliot, University of Northern Colorado Remarks on the Matrix Equation  $X^e = B$  over a Finite Field,

John H. Hodges, University of Colorado, Boulder

Some Mathematica Mistakes? Thomas Kelley, Metropolitan State College of Denver Advanced Programming on the HP-48sx,

Warren W. Kokko, Arapahoe Community College

The Use of Writing in Teaching Mathematics, Steven Leth, University of Northern Colorado Bachelier's Theory of Speculation, C. G. Mendez, Metropolitan State College of Denver The Function Minute: An Effort to Teach Basic Function Concepts More Effectively,

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Jim Olsen, University of Northern Colorado

J. H. Hodges and Matrix Equations, A. Duane Porter, University of Wyoming Stable Qualitatively Correct Interpolants for Accurate Data,

Steven Pruess, Colorado School of Mines

Odd Neighbors and Odd Neighborhoods, Leslie E. Shader, University of Wyoming Why is Bach Out of Tune? John Starrett, Metropolitan State College of Denver What Should you Know about Continuum and how to Teach about it?

Igor Szczyrba, University of Northern Colorado

Computer Algebra Systems and Visualization in Mathematics,

Louis A. Talman, Metropolitan State College of Denver

Chaos for the Uninitiated, Don Teets, South Dakota School of Mines and Technology

William C. Ramaley, Sec'y/Treas Rocky Mountain Section MAA Jack Hodges announced that on behalf of the section, he has accepted the offer for an Aid to Sections proposal on getting the section involved with curriculum reform. There will be a panel at the 1994 meeting of the section. John Kenelly suggested we have someone experienced in grant writing chair the panel, but the national office will send a good selection of transparencies and other material which can be used.

Minutes of Annual Business Meeting, Rocky Mountain Section, MAA, April 3, 1993

Gary Grefsrud, Chair of the section, convened the meeting at 8:10 in the Metal Hall of the Green Center at the Colorado School of Mines

The minutes of the 1992 meeting at Colorado College were accepted as circulated.

Treasurer Bill Ramaley presented a summary of the finances of the section. At the time of the meeting, the section had \$3381.46 in savings and \$1109.35 in a checking account with about \$600 in known debts and expenses incurred in connection with the ongoing meeting as yet unquantified.

The 1994 meeting was announced to be held at South Dakota School of Mines and Technology in Rapid City, South Dakota.

The Nominating Committee put forth Janet Barnett, University of Southern Colorado, and Edwin Hawkins, Mesa State College, for the position of Chairperson-Elect. Janet Barnett was elected. The Committee put forth Gladwin Bartel, Otero Community College, and Patricia Hauss, Arapahoe Community College, for the position of Vice-Chair. Patricia Hauss was elected. Finally, the Committee renominated Bill Ramaley to continue as Secretary/Treasurer. He was elected by acclimation.

Governor Hodges congratulated the section on its support for the Greater MAA Building Fund. A plaque honoring Burton W. Jones, University of Colorado (Boulder) will be placed in the lobby of the MAA building in recognition of our section's members contribution of over \$3000.

The Section gave Gerald Diaz, Air Force Academy, our section's award for Distinguished Teacher. His nomination for the national award was forwarded to the national office.

A discussion ensued on the question of the national officers and Board of Governors moving the 1995 meeting out of Denver because of the Colorado voters approving "Amendment 2" which forbade the passage of laws prohibiting discrimination based on sexual orientation. John Kenelly, of the national office, reported that the national officers had sent letters to Denver Mayor Wellington Andrew Webb and Colorado governor Roy Romer saying that if Amendment 2 is repealed the national officers would "accept later" another offer to come to Denver. Considerable outrage, as well as frustration, was expressed, but no resolution was offered for action.

Following a short discussion, registration fees at future section meetings will be \$2 for students and unemployed persons, \$6 if preregistering, and \$10 at the site of the meeting.

Mesa State College, which last hosted the meeting in 1986, offered to host the 1995 meetings. The section officers were instructed to prepare a new "rotation schedule" plan to be offered at the 1994 meeting for discussion.

The section voted to add the 1993 top scorer on the Putnam exam to our list of free MAA student memberships. Bill Bosch, of the University of Northern Colorado, suggested we also recognize the top scorers on the High School tests. This will be done in some manner, as yet to be determined by the Executive Committee.

In closing the meeting, the Section voted to thank the Colorado School of Mines for its kind hospitality. Appreciation was also extended to Ardel Boes and Willy Hereman for their outstanding organization of the meetings.

Officers for 1993-94 are - Past Chair: Gary Grefsrud, Fort Lewis College

Chair: Tom Kelley, Metropolitan State College of Denver Chair Elect: Janet Barnett, University of Southern Colorado Vice Chair: Patricia Hauss, Arapahoe Community College Secretary/ Treasurer: Bill Ramaley, Fort Lewis College

Governor of Section: C. G. Mendez Metropolitan State College of Denver

Acting Program Chair: Don Teets, South Dakota School of Mines and Technology
Respectively submitted, William C. Ramaley, Secretary/Treasurer
Mathematical Association of America, Rocky Mountain Section

# 1994 Rocky Mountain Section Award Distinguished College or University Teaching of Mathematics

Nominations for the third (1994) Rocky Mountain Section Award for Distinguished College or University Teaching of Mathematics are now being accepted. The Rocky Mountain Section Selection Committee will choose one of the nominees for the Section Award. The awardee will be honored at the Spring 1994 meeting of the Section and will be widely recognized and acknowledged within the Section. The awardee will also be the official Section candidate for the pool of Section awardees from which the national recipients of the MAA Awardees for Distinguished College or University Teaching of Mathematics will be selected except that one of national winner may be selected from another source. There will be at most three national awardees, each of whom will be honored at the national MAA meeting in January 1995 and receive a \$1,000 check and a certificate.

Anyone is entitled to make a nomination. Self-nomination is not permitted. A previous nominee for this award who did not become a Section awardee can be nominated again.

## Eligibility

- -College of university teachers assigned at least halftime during the academic year to teaching a mathematical science in a public or private college or university (from two-year college teaching through teaching at the Ph. D. level) in the United States or Canada. Those on approved leave (sabbatical or other) during the academic year in which they are nominated qualify if they fulfilled the requirement in the previous year.
  - At least five years teaching experience in a mathematical science.
  - Membership in the Mathematical Association of America

# Guidelines for Nomination

The nominees should -

- be widely recognized as extraordinarily successful in their teaching. The word "teaching" is to be interpreted in its broadest sense, not necessarily limited to classroom teaching. It may include such activities as preparing students for mathematical competitions at the college level, for example, the Putnam Prize Competition or the Mathematical Contest in Modeling, or attracting students to become majors in a mathematical science or to become Ph. D. candidates.
  - have teaching effectiveness that can be documented
  - have had influence in their teaching beyond their own institutions
  - -foster curiosity and generate excitement about mathematics in their students.

The idea of an "influence beyond their own institution" can be manifested in many forms,

including demonstrated lasting impact on alumni, influence on the profession through curricular revisions in college mathematics teaching with national impact, influential innovative books on the teaching of mathematics, etc.

Nominations for the Award for Distinguished College or University Teaching of Mathematics must be submitted on the enclosed "Nomination Form." Please follow the instructions on that form precisely to assure uniformity in the selection process both at the Section and the national levels.

If a file on a Section awardee significantly exceeds the prescribed limits (as stated on page 2 of the Nomination Form), it will not be considered for a national award and be returned to the Section.

Please send the nomination packet to:

Professor William C. Ramaley, Secretary Rocky Mountain Section Math. Dept. Fort Lewis College Durango, Colorado 81301

so as to be received no later than December 15, 1993

The Section Selection Committee will select the Section awardee during January and communicate its selection to the national selection committee no later than February 1 so that the national committee can then make its selections.

We look forward to your participation in this exciting MAA venture of taking substantive action to honor extraordinarily successful teaching. We want to see such teaching recognized at all post-secondary school levels. We depend on you to help us identify those who merit such recognition.

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