

Rocky Mountain Section
Mathematical Association of America
Newsletter
December 1,1986

Bill Emerson, editor Department of Mathematical Sciences Metropolitan State College, Box 38 Denver, Colorado 80204

# First Announcement of the Annual Spring Meeting

The Annual Spring Meeting of the Rocky Mountain Section will be held at the University of Southern Colorado in Pueblo, Colorado on April 24-25, 1987. If you have any ideas for papers, workshops, panels or anything else, please contact Prof. Gilbert F. Orr at the Department of Mathematics, University of Southern Colorado, Pueblo, CO 81001.

The invited speaker will be Professor Gerald L. Alexanderson, Valeriote Professor and Chairman, Department of Mathematics, Santa Clara University. He is the author of several texts, including A First Undergraduate Course in Abstract Algebra and Discrete and Combinatorial Mathematics. He is also Editor of Mathematics Magazine, Associate Editor of the American Mathematical Monthly and Associate Director of the William Lowell Putnam Mathematical Competiton.

# **Student Papers**

We will continue our tradition of having student papers presented at the Annual Meeting. Student talks can be on research projects, problems they have solved, reports they have written or even summer employment. Please encourage students at your institution to present a paper at the Annual Meeting.

Darryl Dreiling, a student at Metropolitan State College, presented a paper at the meeting in Grand Juction last spring. He wrote the following report of his experiences.

Having the good fortune to participate in the MAA meeting this year has given me the opportunity to interact with students and professors as well as professionals from industry. Also, listening to other presentations has broadened my interests in mathematics. The MAA meeting has also given me a level of confidence and experience that would be hard to obtain from a classroom.

Interacting with the people involved with the MAA meeting was a very important part of my trip. Being a student from Metro State, I have found it difficult to associate with other students. For example, Jack Lynch, who is in my Calculus III course, was one of the other Metro students giving a presentation. Until the MAA meeting, Jack and I hardly spoke to each other except for maybe a "Hi" or "How are you?" On the trip, I remember having many conversations with Jack, ranging from parachuting to (of course) math.

The presentations sparked some new ideas and encouraged me to learn. There were many presentations of interest; however, a few stand out. For example, professors Don Elliott and William Bosch on "The transport problem 1 and 2", Lloyd Best, from Martin Marietta, on "Increased Accuracy in Nonlinear Programming", and, of course, Professor Paul Halmos on "Problems That I Cannot Solve". Although most of the material was a little bit hard to understand, I am encouraged to learn more. I also enjoyed the panel discussion on "Software Usage", which has shown me that computers are not only important to industry, but can also be a very useful asset in learning mathematics. I am glad to have seen some of the different areas to which mathematics can be applied and am looking forward to the day when I can more fully understand the techniques being used.

Working on a project, then presenting it at the MAA meeting has enhanced my experience and confidence. As a comparison, in speech class, you may write some 5 to 10 minute speeches and deliver them to the class.

Whereas this time I had to learn about a subject and present it to at least a few strangers. I must admit I was extremely nervous. However, when it was over, all the work and upset stomachs were well worth it. Especially when people who listened to my presentation congratulated me on doing a fine job. This was something that all the A's in math class, and all speeches in speech class could not have done. This was my first MAA meeting and I am already looking forward to the next. This time I know I can do an even better job and enjoy it all the more.

# **Future Meetings**

1987 Meeting

University of Southern Colorado

1988 Meeting

Joint Hosting by

Metropolitan State College and University of Colorado at Denver

1989 Meeting

Fort Lewis College

1990 Meeting

????

## **Section Officers**

The Section Officers for the 1986-87 year are

Chair

Frieda Holley

Department of Mathematical Sciences Metropolitan State College, Box 38

Denver, CO 80204

Chair-Elect

Charles H. Brase

Department of Mathematics

Regis College Denver, CO 80202

Vice-Chairperson

Bernard G. Sharp

Department of Mathematics

Otero Junior College La Junta, CO 81050

Program Chairman

Gilbert F. Orr

Department of Mathematics University of Southern Colorado

Pueblo, CO 81001

Secretary-Treasurer, Newsletter Editor

William D. Emerson

Department of Mathematical Sciences

Metropolitan State College

Denver, CO 80204

Governor

Gary W. Grefsrud

Department of Mathematics

Fort Lewis College Durango, CO 813010

# **Rocky Mountain Section Short Course**

The first Short Course sponsored by the Rocky Mountain Section was a resounding success. The short course on discrete math was presented by Professor Bennet Manuel of Colorado State University. Twenty seven participants from Colorado, wyoming, Montana, Idaho, Nebraska, Kansas, Texas, North Carolina and New Hampshire attend the course which was held

at Fort Lewis College July 21-25, 1986. A section short course is planned for the summer of 1987 at Fort Lewis College. While the dates and topic have not been finalized, it is thought that the topic will be on mathematical modeling - perhaps discrete models. When plans are finalized, there will be a more complete announcement.

## **News Items**

## University of Southern Colorado

**Dr. Wilbur Miller**, Professor of Mathematics, is on loan to the Department of Animal Science at Colorado State University for the academic year 1986-1987. Dr. Miller is in residence at C.S.U. where he teaches one graduate level course and spends 80% of his time on mathematical modeling problems.

**Dr. Stephen Bronn**, past president of the Rocky Mountain Section, is on detached duties from the Mathematics Department. He is currently serving as Budget Manager and as the person in charge of Institutional Research.

Ms. Lindsey Bramlett has accepted a graduate student's stipend to return to the University of California-Santa Barbara to further her studies. She is on leave of absence from U.S.C. but is expected to return for the 1988-1989 academic year.

### University of Northern Colorado

Chris Cotter received his Ph.D. from the University of California at Santa Cruz in 1986. His speciality is Hamiltonian or Qualitative Dynamics.

**Igor Szczyrba** received his Ph.D. and Doctor Habilitatis from the University of Warsaw. His speciality is mathematical physics; in particular representation theory of finite groups and Lie groups and their application to quantum physics.

Sabbaticals and Leaves: William Bosch, Winter and Spring 1987; Sam Houston, University of Georgia, Fall 1986; Fred Rumford, Webster University in Georgia, Winter 1987; and Ann Thomas, University of Stuttgart, Winter 1987.

#### Colorado College

Colorado College will have two distinguished visitors this academic year.

Nov. 24 - Dec. 8. Robert J. Daverman, Professor of Mathematics at the University of Tennessee, is an internationally recognized expert in geometric topology and is currently serving as a Fulbright Lecturer in Yugoslavia.

April 6 - May 27. Robin J. Wilson, Senior Lecturer in Mathematics at the Open University (England), is a well-known author and lecturer on graph theory.

#### Colorado State University

Prof. Sidney Resnick has returned to the Department of Statistics from a one year leave in the Mathematics Department of Sussex University, Brighton, England, where he collaborated with Dr. C. M. Goldie on topics in multivariate records and limit theory. A monograph entitled "Extreme Values, Regular Variation and Point Processes" was essentially completed. Professional visits were made to Holland, Israel, Scandinavia, Belgium, Germany and many universities throughout the United Kingdom.

### Western State College

Mr. Glen Calkins has returned to the department after spending a year's sabbatical leave at Oklahoma State University working toward the doctorate.

Miss Leila Barge of Oklahoma State University is teaching on a part-time basis this academic year.

The Mathematics Department has instituted a new comprehensive major in mathematics with an emphasis in computer science.

Although enrollment is somewhat down campus wide, the mathematics courses seem to be holding their own with respect to past enrollments.

The department is currently working on mathematical competency as it relates to the overall role and mission of Western State College. This includes revision/creation of courses, implementation, training of non-mathematical faculty members and testing procedures.

### Metropolitan State College

The Department of Mathematical Sciences is proud to announce the establishment of a new major in Computer Science. The Colorado Commission on Higher Education gave final approval for the B.S. in Computer Science at its July meeting. **Dr. Armando Gingras** was appointed Director of Computer Science.

Three members of the department received promotions effective September 1986: Ms. Ruth G. Yarar from Instructor to Assistant Professor, and Dr. Gail S. Gliner and Dr. William D. Emerson from Assistant to Associate Professor.

**Dr. Earl E. Hasz** was elected chair of the department for a three year term effective September 1986. **Dr. Vern A. Nelson** was elected President-Elect of the Colorado Council of Teachers of Mathematics. He will serve as President for two years and then Past-President for one year.

### University of Colorado at Colorado Springs

**Dr. Leland Jacobs** from New Mexico State University is a visiting professor at the Math Department for the academic year 1986-87.

**Dr. Gregory Morrow**, Associate Professor, joined the math faculty in August 1986. Dr. Morrow received his Ph.D. from the University of Illinois, Urbana, in 1979.

Richard Cornez, Assistant Professor, received a Fullbright award to spend academic year 1986-87 at the University of Botswana, Gaborone, Botswana.

#### Fort Lewis College

Two new faculty have been added to the Department. **Dr. Annette J. Cooper** has her Ed.D. from Oklahoma State University and has had extensive experience teaching in Oklahoma. She also has had considerable experience in private business, most recently being employed by David H. Seeger and Associates in Oklahoma City.

Mr. Robert P. Roe joins us from the University of Wyoming, where he is currently a doctoral student. He has taught public school in Wyoming and has degrees from the University of Colorado at Boulder and the University of Wyoming. His dissertation is in the area of Topological Dynamics and is being directed by Dr. Marcy Barge (a graduate of Fort Lewis). Most recently,

Mr. Roe has been a Lecturer at Montana State University.

Fort Lewis College was awarded \$20,000 by the National Science Foundation to host a Regional Conference in the Mathematical Sciences from July 28 to August 1, 1986. Dick Gibbs was the conference director. The principal lecturer was Joel Spencer from SUNY at Stony Brook and his topic was "Probabilistic Methods in Combinatorics". There were 34 participiants from 20 states at the conference. We were especially pleased that Paul Erdos was able to attend for a couple of days.