

MARYLAND—DISTRICT OF COLUMBIA—
VIRGINIA SECTION OF THE MAA
NEWSLETTER



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Titles and abstracts for their talks together with further details about the meeting will be printed in the next newsletter which will be mailed near the end of October.

REPORT FROM THE REGIONAL EXAMS COORDINATOR

Sally Gardner, Regional Exams Coordinator, reports the following prizes awarded to students within the MD-DC-VA section for their results on the American Invitational Mathematics Examination (AIME).

The following students were awarded \$75 for making 13 out of 15:

Pat R. Brown	Chantilly H. S.	Chantilly, VA
John A. Overdeck	Wilde Lake H. S.	Columbia, MD
Peter S. Shawhan	Springbrook Sr. H. S.	Silver Spring, MD

The following students were awarded \$50 for making 12 out of 15:

Stephen S. Howell	Centennial H. S.	Ellicott City, MD
Gabe B. Sunshine	Bethesda-Chevy Chase	Bethesda, MD

The following students were awarded \$25 for making 11 out of 15:

Thomas Annau	Gilman School	Baltimore, MD
William E. Kirby	E. C. Glass H. S.	Lynchburg, VA
C. Durward McDonnell	Walter Johnson H. S.	Bethesda, MD
Kenneth R. Young	Winston Churchill H. S.	Potomac, MD
Michael E. Zieve	Midlothian H. S.	Midlothian, VA

The above listed students were among the 75 students eligible to participate in the fifteenth USA Mathematical Olympiad (USAMO) on April 22, 1986. Pat Brown of Chantilly H. S., Chantilly, VA and John Overdeck of Wilde Lake H. S., Columbia, MD, received Honorable Mention for their scores on the USAMO.

In addition to the above mentioned exams, two additional exams of interest are the American Junior High School Mathematics Examination (AJHSME) and the American High School Mathematics Examination (AHSME). The dates for the next round of examinations is as follows:

AJHSME	Tuesday, December 9, 1986
AHSME	Tuesday, March 3, 1987
AIME	Tuesday, March 24, 1987
USAMO	Tuesday, April 28, 1987

INTERNATIONAL MATHEMATICAL OLYMPIAD

Six Russian high school students solved their way to a tie with the Russian team for first place in the 27th International Mathematical Olympiad in Warsaw on July 9 and 10. Both teams achieved scores of 203 out of a possible 252. There were 37

CALL FOR PAPERS FOR THE FALL MEETING

Proposals for talks to be presented at the November 21-22 meeting of the MD-DC-VA section of the Mathematical Association of America are solicited.

The meeting will be held at Loyola College, Baltimore, Maryland on Friday, November 21, and Saturday, November 22, 1986. Papers on all aspects of mathematics and mathematics education are welcomed and encouraged.

During the past few years the section has had some success in sponsoring student papers. This is to be continued and encouraged. Faculty members are urged to assist their students in submitting proposals for student papers. Any student conducting an independent project in mathematics or computer science should be informed of this opportunity to share his/her ideas.

Presentation of papers is usually limited to thirty minutes, but exceptions can be easily arranged. Those interested in presenting papers are asked to send an abstract to:

William M. Sanders
Vice-Chairman for Programs
Department of Mathematics and Computer Science
James Madison University
Harrisonburg, Virginia 22807

The deadline for receipt of the abstracts is October 1, 1986.

SPEAKERS FOR THE FALL MEETING

Dr. Harold Reiter, University of North Carolina, Charlotte, will be the speaker at the banquet on Friday, November 21, 1986. His interests include operations research, game theory, discrete mathematics along with traditional topics.

Dr. Paul Stockmeyer, The College of William and Mary, will give the invited address on Saturday, November 22, 1986. Among other things, his interests include combinatorics, graph theory and discrete mathematics.

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nations participating in the Olympiad.

The only Special Prize, given for a particularly elegant solution to one of the Olympiad problems, was awarded to Joseph Keane of Pittsburgh, PA. The judges also awarded individual first, second and third prizes to deserving team members. Three US team members received first prizes: Joseph Keane with a score of 41 out of a possible 42 points, David Grabiner of Claremont, CA with a score of 36, and Jeremy Kahn of New York, NY with a score of 35. The remaining team members all received second prizes: John Overdeck of Columbia, MD with a score of 32, Darlen Lefkowitz of New York, NY (30), and William Cross of Kalamazoo, MI (29).

The US team was chosen on the basis of their performance in the USAMO which was held on April 22, 1986 and on an evaluation of their work at a rigorous 4-week Training Session. The Olympiad Training Session was held from June 4 to July 3 at the US Naval Academy.

The Mathematical Olympiad activities are sponsored by the Mathematical Association of America, Society of Actuaries, Mu Alpha Theta, National Council of Teachers of Mathematics, Casualty Actuarial Society, American Statistical Association and American Mathematical Association of Two Year Colleges. Financial support was provided by IBM, the Army Research Office, the Office of Naval Research and Hewlett-Packard.

For all you frustrated problem solvers, here is a sample problem from the 27th International Mathematical Olympiad:

"Let d be any positive integer not equal to 2, 5 or 13. Show that one can find distinct a, b in the set $\{2, 5, 13, d\}$ such that $ab-1$ is not a perfect square."

IFRICS

The Institute for Retraining in Computer Science (IFRICS) program was initiated under the direction of Ed Dubinsky as a response to the critical and growing shortage of college teachers of computer science. It has been guided since its creation by the joint ACM/MAA Committee on Retraining for Computer Science.

The program is designed to provide faculty from other disciplines such as mathematics with the qualifications necessary to teach a major portion of the ACM '78 core curriculum in computer science. The program takes full advantage of the mathematical background of the participants to provide a strong exposure to the fundamental concepts of the growing field of computer science. During the intervening year each participant is expected to teach a computer science course and complete a major programming project to ensure that the participants gain practical experience in applying what they learn about modern methods of program development.

In addition to the regular two summer program described above, IFRICS will offer an independent four week course during the summer of 1987 entitled "Computer Based Discrete Mathematics". Details on this course can be obtained from the IFRICS offices.

Faculty for both branches of the Institute (Clarkson University and Kent State University) are selected from among the top computer science departments in North America based upon outstanding records in both teaching and research. In its first four summers of operation the Institute has enrolled 246 participants representing over 200 schools from 44 states and six foreign countries.

The dates for the next session are:

Clarkson University	June 1, 1987 - July 31, 1987
Kent State University	June 15, 1987 - August 14, 1987

Interested candidates should write for more information and application forms to the director at either campus:

Ed Dubinsky, IFRICS Director	Darrell Turnidge, IFRICS Director
Department of Mathematics & Computer Science	Department of Mathematical Sciences
Clarkson University	Kent State University
Potsdam, New York 13676	Kent, Ohio 44242
Phone: (315) 268-2382	Phone: (216) 672-2490

ICM 86

The 1986 International Congress of Mathematicians took place from August 3 - 11, 1986 at the University of California, Berkeley. There were nearly 4000 registered participants at this quadrennial event. At the opening ceremony on August 3, it was announced that Fields Medals had been awarded to Simon Donaldson (Oxford University, England), Gerd Faltings (Princeton University) and Michael Freedman (University of California, San Diego). Donaldson and Freedman received their awards for their exciting work in the topology of 4-manifolds, work which confirmed the impression that the world of four dimensions is in many respects the strangest of all. Faltings is recognized for having solved the Mordell Conjecture. In addition it was announced that the Nevanlinna 50-year-old problem in number theory known as the Mordell Conjecture had been awarded to Lesile Valiant (Harvard University), a computer scientist who has cast new light on the relationship between theoretical computer science and mathematics, and thereby stimulated important work in modern mathematics.

An invitation was extended from Kyoto, Japan to host the next Congress in August, 1990.

Officers of the MD-DC-VA Section

Chairman	Robert Lewand, Goucher College
Chairman-Elect	Elizabeth Teles, Montgomery College (on leave, phone: (301) 262-9586)
Vice-Chairman, Programs	William Sanders, James Madison University
Vice-Chairman, Membership	John Milcetic, University of the District of Columbia
Secretary	Beverly Phillips, Thomas Nelson Community College
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Governor	Ben Fusaro, Salisbury State College
Summer Course Coordinator	Ben Fusaro, Salisbury State College
Regional Exam Coordinator	Sally S. Garber, Hollins College

Items to be considered for inclusion in the next newsletter should be received by the newsletter editor by October 1.