Iowa Section

The Iowa Section meetings of the Mathematics Association of America were held jointly with the Iowa Section of the ASA (statisticians) April 11-12, 1997, on the campus of Iowa State University in Ames, Iowa. The meetings were run by chair Jim Freeman and the program was set up by chair-elect Stephen Willson. We had a considerable snow storm on April 11th which kept many of our regular attendees away. There were 31 regular registrations, 12 ASA registrations and 29 student registrations. Participants contributed 19 papers and one panel discussion. Eight of the papers were given by students.

Our invited speaker was unable to be with us because of the bad weather. In his place, Stephen Willson gave an excellent talk on Friday night on knots and A. M. Fink did his usual superb job with a talk on fair division. These two speakers did a remarkable job on very short notice.

Contributed Papers:

- * The converse to Pompieu's theorem by Irvin Roy Hentzel, Iowa State University
- * Matrix completions and the Lyapunov equation by Luz M. DeAlba, Drake University
- * Can a computer lab be a compenent for Abstract Algebra? by Al Hibbard, Central College
- * Visualizing Linear Algebra with the ATLAST Matlab files by Ruth Berger, Luther College
- * Our Changing Calculus Classroom by Brian Keller, Iowa State University
- * Hands on lab: Simple harmonic motion by Heather Thompson and Chris Russell, Iowa State University
- * Hands on lab: Differential Equations by Chris Russell and Heather Thompson, Iowa State University
- * Cooperative learning in College Algebra by Bernadette M. Baker, Drake University
- * On a mathematical model of ski skating by Kenneth R. Driessel, Iowa State University
- * Pythagorean squares, Pythagorean triples and ellitic curves by Charles H. Jepsen, Grinnell College
- * Measurabel Hamel Bases by Alexander Abian, Iowa State University

Student Speakers at the Iowa Section MAA, at Iowa State University 1997

- * $e^{2\pi i} = I^2$, but what about n! in the non-trivial case? by Elizabeth Biermann, Cornell College
- * Combinatorial models of smooth algebraic curves in the real projective plane by Suzanne M. Shontz, University of Northern Iowa
- * What's hot and what's not in fuzzy logic? by John Hamman, University of Northern Iowa
- * Solution by radicals: a different approach by Alexander Samuel, University of Northern Iowa
- * Multiresolutional analysis in wavelet theory by Thomas Martin Oleson, Jr., University of Northern Iowa
- * Perron-Frobenius theory for small matrices with some negative entries by D. Alex Olson, Drake University
- * The leading eigenvalues of path matrices by Sol Bobst, Drake University
- * Codes over Z_m by Taher Abualrub and Robert Oehmke, University of Iowa

Business:

Jim Freeman of Cornell College chaired the meeting. Elected to offices were: Ruth Berger, Luther College, as Chair-Elect; Stephen Willson, Iowa State University, as Chair; Jim Freeman, Cornell College, as Past-Chair; R. B. Campbell, University of Northern Iowa, as Public Information Officer.

In other business, it was announced that Grinnell won the annual Iowa Mathematics Competition with Northern Iowa Area Community College coming in second followed by Iowa State University, Drake and another Grinnell team. The Klein Bottle Trophy was presented to the winning institution's representative.

It was suggested that the Iowa Section develop an icon for use on the Web site as well as in section correspondence. The Klein bottle was suggested as a possibility. This will be brought up at next year's meeting.

The Web page is currently under construction. It can be viewed but it is not finished. Next fall and spring plans are being made to put the newsletter on the web site.

We did not give out a Distinguished Teacher Award this year because we had no nominations.

Respectfully submitted,

Steve & Minio

Steven D. Nimmo, Secretary-Treasurer.