Iowa Section Meeting of the
Mathematical Association of America –-

April 4-5, 2003
University of Northern Iowa, Cedar Falls

Friday, April 4

1:30-4:30   **Registration and Exhibits**   Wright 5

2:00-4:30   **Concurrent Session 1**   Wright 7   chair: Al Hibbard
2:00   **On the Use of Computer Algebra Syntax in the Calculus Classroom**, Russell Goodman, Central College
2:30   **Using the Pivot Package in Linear Algebra and Finite Mathematics**, Al Hibbard, Central College
3:00   **The Classical Ramsey Number $R(3,3,3,3;2)$ Is No Greater Than 62**, Richard Kramer, Iowa State University
3:30*   **An Elementary Integration Arising in Astronomy**, Joseph C. Keller, Iowa State University
4:00   **What it Took Sylvester 3 Days to Do, I Can Do in 2**, A. M. Fink, Iowa State University

2:00-4:30   **Concurrent Session 2**   WRT 109   chair: Murphy Waggoner
2:00   **What's Your Angle? The Role of Definitions in Algebra and Geometry**, Cathy Gorini, Maharishi University of Management
2:30   **Mathematics Without Words: A project to study visual representations of mathematical ideas**, M. E. (Murphy) Waggoner, Simpson College
3:00   **The Best Fitting Line**, Irvin Roy Hentzel, Iowa State University
3:30   **The Number of E-ban Numbers: It Can Go Either Way**, Charles Ashbacher, *Journal of Recreational Mathematics*, Mount Mercy College
4:00   **Orders Of L-Shaped Polyominoes**, Charles Jepsen, Grinnell College

2:00-4:30   **Concurrent Session 3**   Wright 119   chair: Ron Smith
2:00   **The Largest Impossible Bet**, Ronald K. Smith, Graceland University
2:30   **John Graunt, John Arbuthnott, and the Emergence of Statistics**, R. B. Campbell, University of Northern Iowa
3:00   **On the Number of 100 . . . 01 Strings in Certain Bernoulli Trials, and Random Permutations**, Sunder Sethuraman, Iowa State University
3:30   **Periodic point numbers and group structure - or 'the world's two weirdest primes'**, Christian Roettger, Iowa State University
4:00*   *Mathematica*-**Aided Propagation Phenomena in Operator Theory**, Jasang Yoon, University of Iowa

4:45-5:45   **Round Table Discussion**   Wright 7
         Teacher Certification in Iowa, Joyce Becker, Luther College; Rob Keller, Loras College; Catherine Miller, University of Northern Iowa

Dinner on your own

7:30-9:00   **Plenary Session 1 and Reception**   Sabin 102
         "I Know It's True, I Just Can't Prove It!", E. Todd Eisworth, University of Northern Iowa

* (**) indicates a talk by a graduate (undergraduate) student.

Saturday, April 5

8:30-8:45 **Official Welcome** Sabin 102 Kichoon Yang, Dean, College of Natural Sciences, University of Northern Iowa

8:45-9:45 **Plenary Session 2** Sabin 102
Finding Your Way in a Graph, Ronald Graham, University of California, San Diego and President of the MAA

10:00-10:50 **Plenary Session 3** Sabin 102
Undergraduate Programs and Courses in the Mathematical Sciences: A CUPM Curriculum Guide, Herbert E. Kasube, Bradley University and MAA CUPM

10:00-1:00 **Undergraduate Student Competition** Wright, Sabin, and Seerley Halls
Ruth Berger, Luther College

11:00-11:50 **Concurrent Round Table Discussion 1** Sabin 129
MAA Student Chapters, Cathy Gorini, Maharishi University of Management

11:00-11:50 **Concurrent Round Table Discussion 2** Sabin 102
Cooperation among Mathematics Departments in the State, Jim Freeman, Cornell College

12:00-12:50 **Iowa Section of the MAA Business Meeting** Sabin 102
Steve Nimmo, Morningside College, Chair of the Iowa Section of the MAA

Lunch on your own

2:00-4:30 **Concurrent Session 4** Wright 7 chair: Bernadette Baker
2:00** **Searching for (96, 20,4) Difference Sets,** Logan Axon, Grinnell Colllege
2:30** **(96,20,4) Difference Sets and Designs,** Nathan Gotman, Grinnell College
3:00 **Reliable functions to build phylogenetic trees using minimum evolution,** Stephen J. Willson, Iowa State University
3:30 **Thematization Of The Calculus Graphing Schema,** Laurel Cooley, York College-CUNY; Bernadette Baker (presenter), Drake University; María Trigueros, ITAM
4:00** **Optimal Voting Strategies for** *The Weakest Link,* Amy Winter, Cornell College

2:00-4:30 **Concurrent Session 5** Wright 9 chair: Russell Campbell
2:00 **Experience of the DevMap Approach to Elementary Algebra,** Anne Dow, Maharishi University of Management
2:30 **Infinite Series for Logarithms using Cyclotomic Polynomials and Aurifeuillian Identities,** Marc Chamberland, Grinnell College
3:00 **Association Schemes Are Everywhere,** Sung-Yell Song, Iowa State University
3:30 **Programming Buttons in Mathematica,** Al Hibbard, Central College [Note: This session will meet in Wright 112.]

2:00-4:00 **Concurrent Session 6** Wright 10 chair: Jonathan D. H. Smith
2:00 **Trisecting an Angle,** Phil Wood, Baxter, Iowa
2:30 **An information-theoretic approach to demography,** Jonathan D. H. Smith, Iowa State University
3:00** **Octagon Loops,** Emily Wergin, Grinnell College
3:30** **Comparing the SAT and ACT,** Ben Jones, Grinnell College

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