2006 Iowa Mathematics Meeting[*]

Iowa State University
Ames, IA
April 7-8, 2006

Friday, April 7, 2006

Registration   Carver Second Floor

   2:30-4:30

Exhibits   Carver

   2:30-4:30

Concurrent Session 1   Carver 202

   3:00-3:20   *Arrow's Hypotheses*
   Irvin Hentzel, Iowa State University
   3:30-3:50   *Decomposing Voters*
   Mariah Birgen, Wartburg College
   4:00-4:20   *Classroom Capsule: Teaching Challenge-Response Arguments*
   Reginald Laursen, Luther College

Concurrent Session 2   Carver 204

   3:00-3:20   *Some Hands-on Workshops for Elementary and Intermediate Algebra Courses*
   M. Anne Dow, Maharishi University of Management
   3:30-3:50   *Existence of strong solution for a class of nonlinear parabolic systems*
   ** **Kunlun Liu**, Iowa State University
   4:00-4:20   *computing multivalued velocity and electric field of 1D Euler-Poisson equation*
   ** **Zhongming WANG**, Iowa State University

Concurrent Session 3   Carver 205

   3:00-3:20   *Godel Disrobes: a naked approach to incompleteness*
   ** **Jeremy Alm**, Iowa State University
   3:30-3:50   *Some Properties of the Smarandache Fitorial and Supplementary Fitorial Functions*
   Charles Ashbacher, Mt. Mercy College
   4:00-4:20   *Vertex identifying codes in graphs: definitions, theorems and open problems*
   Ryan Martin, Iowa State University

Break

   4:25-4:35

Panel Discussion: On getting a job for graduate students   Carver 202

   4:35-5:20

Round Table Discussion: Section NExT   Carver 204

   4:35-5:20

Dinner   See Meals Information Section

   5:30-7:30

Plenary Session 1   Carver 101

   7:30-8:30   *Episodes in The Early History of The Lucasian Chair*
   Jim Tattersall, Providence College

Reception   Carver Lobby

   8:30- --

Saturday, April 8, 2006

Registration   Carver Lobby

   8:15-10:00

Plenary Session 2   Carver 101

   8:30-9:30   *Vignettes in Number Theory*
   Jim Tattersall, Providence College

Break

   9:30-9:45

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[*] * denotes an undergraduate speaker and ** indicates a graduate student speaker

Concurrent Session 4   Carver 124

9:45-10:05	*Why does 0! = 1? The evolution of the gamma function* **Steve Bean**, Cornell College
10:15-10:35	*The Toeplitz-Silverman Theorem Part II* **Alexander Kleiner**, Drake University
10:45-11:05	*Prolongations on a Riemannian Manifold* ** **Alfredo Villanueva**, University of Iowa

Concurrent Session 5   Carver 128

9:45-10:05	*Model Fitting and Selection for County-Level Depression Hospitalization Rates Using Bayesian Statistical Methods* ** **Scott Wood**, University of Iowa
10:15-10:35	*Teaching Mathematical Probability and Statistics with Internet Applications and R* **Michael Larsen**, Iowa State University
10:45-11:05	*Protein Structure Determination: A Rigid Geometric Build-up Algorithm for Solving a Distance Geometry Problem with Sparse Exact Distance Data* ** **Di Wu**, Iowa State University

Concurrent Session 6   Carver 132

9:45-10:05	*"Convergence depth": proof of the nonrotation and nontranslation of galaxies* ** **Joseph Keller**, Iowa State University
10:15-10:35	*The Remarkable Equation tan(x) = x* **Dave L. Renfro**, ACT Inc.
10:45-11:05	*Hey, Kids! Improve Your Theorems! Add Superfluous Hypotheses!* ** **Jacob Manske**, Iowa State University

Break

11:15-11:25

Iowa Section Business Meeting   Carver 101

11:25-12:10

Lunch together or on your own

12:10-1:40

Concurrent Session 7   Carver 124

1:40-2:00	*Subgroups of the Rubik's Group* **Brian Birgen**, Wartburg College
2:10-2:30	*Mathematics by Experiment* **Marc Chamberland**, Grinnell College

Concurrent Session 8   Carver 128

1:40-2:00	*Global Dynamics and Chaos* **Wolfgang Kliemann**, Iowa State University
2:10-2:30	*The Polynomial Root Squeezing Theorem* * **Justin From**, Central College

Concurrent Session 9   Carver 132

1:40-2:00	*The stable endomorphism group of non-simple string modules over a very particular finite dimensional algebra.* ** **Giovanna Llosent**, University of Iowa
2:10-2:30	*Primitive prime divisors of Mersenne numbers via Uniform Distribution* **Christian Roettger**, Iowa State University

Break

2:35-2:45

Concurrent Session 10   Carver 124

2:45-3:05	*Comparison of P-matrix completions with Q-matrix completions.* **Luz De Alba**, Drake University
3:15-3:35	*Visualizing Linear Algebra with Geometer's Sketchpad* **Catherine Gorini**, Maharishi University of Management
3:45-4:05	*Using NASCAR to Illustrate Optimization* **Mark Mills**, Central College

Concurrent Session 11   Carver 128

2:45-3:05	*Reconstructing genomes in the presence of hybridizations* **Stephen Willson**, Iowa State University
3:15-3:35	*Sperm Competition Games* **Rick Spellerberg**, Simpson College
3:45-4:05	*Chemotactic Collapse in Keller-Segel Equation* ** **WEN ZHOU**, Iowa State University