The 1978-79

LECTURE PROGRAM

OF THE

IOWA SECTION

OF THE

MATHEMATICAL ASSOCIATION OF AMERICA
The Lecture Program of the Iowa Section of the Mathematical Association involves mathematicians in Iowa who are interested in visiting colleges and lecturing to undergraduate students. Each lecturer has volunteered to do so without an honorarium, but the host college is to provide for all expenses incurred (mileage, meals, and lodging). Please be sensitive for the need for lodging if the lecturer must travel quite far.

Note that the list of visiting mathematicians includes the titles of the lectures they have suggested, the level of each lecture (level I = freshman, sophomore; level II = junior, senior), the day of the week on which they prefer to visit, and a mileage limit from their home.

Each college that decides to invite a lecturer should have a representative write directly to the lecturer to make arrangements for a visit. The Iowa Section wishes to record the activity in the program, and thus we ask that notifications of the visits be sent by the schools to the secretary of the Iowa Section, Professor James Peake, Department of Mathematics, Iowa State University, Ames, Iowa 50010.
Name: Kendall E. Atkinson
Department of Mathematics
University of Iowa
Iowa City, Iowa 52242

Preferred Week Day:
M _ T _ W _ Th _ F _

Preferred Mileage Limit:
within __100__ miles.

Title
1. Polynomial Interpolation
2. Integral Equations
3. Numerical Integration

Level
I - II
II
I - II

Name: Peter Colwell
Department of Mathematics
Iowa State University
Ames, Iowa 50011

Preferred Week Day:
No Preference

Preferred Mileage Limit:
within __200__ miles.

Title
2. Power Series
3. Abel's Integral Equation: An Answer With Some Interesting Questions
4. Programmable Calculators as an Excuse for Using Mathematics

Level
I
II
II
I or II (examples for each level)
Name: Robert B. Feinberg  
Mathematics Department  
Iowa State University  
Ames, Iowa 50011

Preferred Week Day:
M ☑ T ☑ W ☑ Th ☑ F ☑

Preferred Mileage Limit: 
No limit

Title

1. Symbolic Solution of Linear Differential Equations

Level

II

Name: A. M. Fink  
Mathematics Department  
Iowa State University  
Ames, Iowa 50010

Preferred Week Day:
M _ T _ W _ Th ☑ F _

Preferred Mileage Limit: 
No limit

Title

1. Polynomials Are All You Have to Integrate
2. Roundheads Have Higher IQ's Than Squares
3. Max-Min Problems Without Calculus
4. To Know the Difference, is Sometimes Enough
5. How to Divide a Cake Fairly

Level

II

I

II

II

I
Name: Roy F. Keller
Computer Science Department
Iowa State University
Ames, Iowa 50010

Preferred Week Day:
M__ T__ W__ Th√ F__
Preferred Mileage Limit:
within 150 miles.

Title

1. On Teaching "Into" Programming
2. On Constructing Correct Programs
3. Numerical Analysis and Constructing Algorithms
4. Developing A Computer Science Curriculum

Level
I
II

Name: Philip Kutzko
Department of Mathematics
University of Iowa
Iowa City, Iowa 52240

Preferred Week Day:
M__ T√ W__ Th√ F__
Preferred Mileage Limit:
within 250 miles.

Title

1. The Chinese Remainder Theorem:
The Development of a Mathematical Idea

Level
II
Name: Lynn J. Olson
Department of Mathematics
Wartburg College
Waverly, Iowa 50677

Preferred Week Day:
M  T  W  Th  F

Preferred Mileage Limit:
within ___ miles.

Title

1. Elementary Linear Programming and the Simplex Algorithm

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Name: Dennis Roseman
Mathematics Department
University of Iowa
Iowa City, Iowa 52240

Preferred Week Day:
M  T  W  Th  F

Preferred Mileage Limit:
within 150 miles.

Title

1. The Exploration of Four Dimensional Space
2. The Mathematical Theory of Knots
3. Klien Bottles and Stuff Like That:
The Topology of Manifolds

Level

1 or II
1 or II
II
Name:  Dennis R. Steele

Department of Mathematics
Graceland College
Lamoni, Iowa  50140

Preferred Week Day:
M  T  W  Th  F

Preferred Mileage Limit:
within Iowa.

Title
1. Picard-Chebyshev Iterations on Non-Linear Initial Value Problems
   II
2. Ten "Tricks" and Their Continual Occurrence in Applied Mathematics
   II
3. Workshop Topology: An Introduction to Non-Numerical Mathematics
   I
4. Some Mysterious Numbers and Their Unexpected Occurrences
   I

Name:  K. D. Stroyan

Math. Sciences
University of Iowa
Iowa City, Iowa  52242

Preferred Week Day:
M  T  W  Th  F

Preferred Mileage Limit:
within 200 miles.

Title
1. Elementary Infinitesimal Calculus
   (with real live infinitesimals!)
   I or II
Name: Henry M. Walker  
Department of Mathematics  
Grinnell College  
Grinnell, Iowa 50112

Preferred Week Day:  
P.m.  
M T W Th__ only F

Preferred Mileage Limit:  
Anywhere is fine.

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<td>1. Math for Spies: Cryptanalysis Before 1920</td>
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<td>2. Calculus in Probability</td>
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<td>3. Group Theory in Topology</td>
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<td>4. Sorting Algorithms</td>
<td>I</td>
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<tr>
<td>5. Computer Scheduling: An Example of Calculus and Probability in Computer Science</td>
<td>I or II</td>
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