Joint Meetings of the Iowa Sections of MAA, ASA and IMATYC Coe College April 7-8, 1989

INVITED ADDRESSES:

Leonard Gillman, University of Texas at Austin, "Mathematics and the public"

Leonard Gillman, University of Texas at Austin, "An "obvious" induction"

David S. Moore, Purdue University, "Teaching Statistics as a Respectable Discipline" STUDENT PAPERS:

John Seal, Drake: "ON GROWING LARGE TREES"

John Squires, Drake: "HOW TO TIE AMATRIX TO A KNOT"

Dave Fell & Mario Affatigato, Coe: "TRANSFORMATIONS OF THE COMPLEX PLANE"

Lawrence Kidder, Drake: "MATRICES WITH REPEATING DIAGONALS"

Nuwan Nanayakkara, ISU: "LEAST-SQUARES REGRESSION SURFACE AS A PHYSICAL

SYSTĖMIN EQUILIBRIUM"

Martin O. Grondona & Noel A. Cressie, ISU: "RESIDUAL-BASED ESTIMATORS FOR COVARIANCE

FUNCTION AND YARIOGRAM

Lori O'Brien, Loras & Blake Scranton, Clarke: "CHAOTIC DYNAMICAL SYSTEMS"

Susan Borgerding & Lori O'Brien, Loras: "DETERMINISTIC FRACTALS"

Philip Zee, Loras: "PERFECT SQUARE, TRIANGULAR NUMBERS" Veronique Ziegler, MIU: "GOING FROM POSETS TO TOPOLOGICAL SPACES"

Paul Shimura, MIU: "GOING FROM GRAPHS TO POSETS"

CONTRIBUTED PAPERS:

Ronald Smith, Graceland: "MINIMAL BALLS AND PARALLELOGRAM LAW" Irvin R. Hentzel and Richard Sprague, ISU: "A STRANGE DUAL FOR A

PROBLEM ON A SQUARE

Raul E. Curto and Paul S. Muhly, Iowa: "HYPONORMAL SYSTEMS OF

OPERATORS: APPLICATIONS OF COMPUTERS

TO INFINITE DIMENSIONAL PROBLEMS'

H. K. Krishnapriyan, Drake: "ON SUMS OF POWERS OF INTEGERS"

A. Kleiner and M. Randic, Drake: "RESULTS ON TERMINAL POLYNOMIALS"

M. Randic' and Bernadette Baker, Drake: "GRAPHS WITHINTEGER

EIGENVALUES"

Daniel D. Anderson, Iowa: "POWERS OF AN IDEAL IN A COMMUTATIVE RING" Gilbert Strang, MIT: "CHANGES IN CALCULUS"

Douglas A. Swan, Momingside: "USING CAS AND PASCAL PROGRAMS IN TEACHING

DIFFERENTIAL EQUATIONS"

Eric W. Hart, MIU: "LINEAR ALGEBRA: A SMOOTH TRANSITION TO THE REALM OF ABSTRACTION AND PROOF"

James T, Sandefur, Georgetown: "USING DISCRETE DYNAMICAL SYSTEMS TO INSPIRE ČALCULUS'

Catherine A. Gorini, MIU: "A GEOMETRY COURSE FOR ART MAJORS" Stephen J. Willson, ISU: "TEACHING ABOUT FRACTALS"

K.D. Stroyan, Iowa: "AUNIFIED COURSE IN ANALYTIC YECTORS AND COMPUTER GRAPHICS"

Anne Dow, MIU: "AMETHOD FOR IMPROYING MATHEMATICAL INTUITION IN THE CLASSROOM"

Gordon Bril, Luther: "TEACHING EXPERIMENTAL DESIGN AT A FOUR YEAR COLLEGE" John Roth, Director of Placement Services, ACT: "THREE NEW MATH PLACEMENT SERVICES FROM ACT"

Panel Discussion, Organized by Tom Moore, Grinnell: