János Bolyai Mathematical Society ASL '92 Logic Conference H-1027 Föutca 68 Budapest, Hungary

The conference e-mail addresses are: aslogic@sztaki.hu (aslogic@sztaki.uucp from Europe)

or

h2499as1@ella.hu

## EIGHTEENTH HOLIDAY MATHEMATICS SYMPOSIUM

## NEW MEXICO STATE UNIVERSITY December 27-31, 1991

## THE IMPACT OF SOFTWARE SYSTEMS ON MATHEMATICAL RESEARCH

Professor J.L. Selfridge Florida Atlantic University

Professor J.S. Devitt University of Saskatchewan

The Department of Mathematical Sciences continues its holiday research symposium series with a program including ten lectures, two each day, jointly presented by Professors Selfridge and Devitt, along with sessions for contributed papers, informal talks, and discussions. The main topics are:

A brief history of mathematical computation.

Creating a laboratory for mathematics.

What constitutes an algebra system?

## X Modern Logic ω

Features distinguishing some of the half-dozen major systems.

A case study in graph theory: network reliability.

Development of an applied mathematics package.

How software is changing the face of numerical analysis.

Developments in number theory and discrete problem solving.

What do I need to bring a system to my workplace?

Future directions: hardware, algebra engines, user interfaces.

From 1963 through 1976, the Department held a series of Holiday Symposia during the winter recess. The lecturers were Samuel Eilenberg, Mark Kac, I.M. Singer, Saunders Mac Lane, Paul J. Cohen, Irving Kaplansky, George W. Whitehead, Herman Chernoff, Errett Bishop, Raoul Bott, Gian-Carlo Rota, John Tate, and A.S. Wightman. In 1988, both NMSU and the AMS celebrated their centennials and the series was reinstated at that time. The last three speakers and topics were: John Tate, Fermat's Last Theorem, Joan Birman, Braids and Knots, and Douglas C. Ravenel, Homotopy Theory. In 1992, the Symposium will feature Professor Georgia Benkart speaking on Lie Group Representations and Combinatorics.

Las Cruces is located at the intersection of Interstates 10 and 25 in the sunny Mesilla Valley, 40 miles north of El Paso, Texas, and Juarez, Mexico. The weather is usually very nice and is often warm during the winter months.

The Department extends its invitation to all interested mathematicians. Assistance in reserving motel space at reduced rates in Las Cruces and transportation to and from El Paso will be provided. Inquiries should be directed to: Robert J. Wisner, Department of Mathematical Sciences, New Mexico State University, Las Cruces, NM 88003.