

## UTAH STATE UNIVERSITY MATHEMATICS CONFERENCE

On July 20–24 1984, Utah State University hosted its fourth annual mathematics conference. The theme was differential equations and there were twenty nine participants from the United States, Canada and England. This conference was organized by Jerry Ridenhour, Russell Thompson and Lance Littlejohn, all of the mathematics department at Utah State. Among the participants were five principal speakers:

- (1) W.N. Everitt (Birmingham, England)
  - i) Linear Ordinary Quasi-Differential Expressions
  - ii) The Titchmarsh-Weyl  $m$ -coefficient
- (2) J.W. Bebernes (Colorado)  
Some Mathematical Questions arising in Combustion Theory
- (3) A.M. Krall (Penn State)  
The Singular Sturm-Liouville Problem and Orthogonal Polynomials
- (4) K. Schmitt (Utah)  
Quasilinear Equations with “Jumping” Nonlinearities
- (5) A. Zettl (Northern Illinois)  
The Essential Spectrum of Nonselfadjoint Sturm-Liouville Operators

In addition, there were seven contributed talks given. The speakers and their titles were:

- (1) William A. Harris (USC)  
Asymptotic integration of a nonstandard adiabatic oscillator
- (2) David A. Sánchez (New Mexico)  
Asymptotic estimates of stability regions for a certain class of Volterra integro-differential equations
- (3) Davis Cope (North Dakota State)  
Uniformly convergent expansions for Sturm-Liouville eigenvalues
- (4) Leon Hall (Nebraska)  
Orthogonality conditions for nonhomogeneous differential equations
- (5) Lucio Tavernini (Texas, San Antonio)  
Differential Automata and their discrete simulators
- (6) Richard C. Brown (Alabama)  
Dual Dirichlet Inequalities
- (7) David Siegel (New Mexico Institute of Mining and Technology)

Monotonicity properties of solutions to systems of differential equations

The mathematics department would like to thank all of these speakers and the other participants for making this a very fine conference. In addition many thanks go out to L. Duane Loveland of the mathematics department and the Office of Vice President for Research at Utah State University for their generous support in funding this conference. A special thanks go to Managing Editor William R. Scott of the Rocky Mountain Journal of Mathematics for his willingness to publish the talks of the principal speakers and his patience for waiting for the papers to reach his hand. Those papers received now follow.

Jerry Ridenhour  
Russell Thompson  
Lance Littlejohn