Above a large percentage of the participants in the Fourteenth Summer Symposium is recorded for posterity and anyone else who cares to view the group. Below is an unposed (well almost unposed) picture of the three conference organizers and this years winner of the Andy. Left to right they are Dan Rinne, Lee Larson (the winner) Chris Freiling and John Walsh. As a public service announcement we would like to warn all future winners against shipping the prize home with your clothes in an unpressurized luggage compartment of any aircraft.

THE FOURTEENTH SUMMER SYMPOSIUM
ON REAL ANALYSIS
California State University, San Bernardino
June 20–23,1990

The Fourteenth Summer Symposium on Real Analysis was held on the campus of California State University, San Bernardino, June 20-23, 1990. The conference organizers, Chris Freiling (CSUSB), Dan Rinne (CSUSB), and John Walsh (TRW) wish to acknowledge the financial support of the National Science Foundation, the assistance with conference preparations of Dean James Crum (CSUSB), the generosity of TRW in providing needed release time for John Walsh, and the general assistance of the Editorial Staff of the **Real Analysis Exchange**. Likewise the **Exchange** editorial staff, on behalf of all conference participants, wishes to thank the conference organizers for their outstanding and tireless work in hosting this successful symposium.

The conference featured invited hour addresses by:

- **HOWARD BECKER**, University of South Carolina

- **JACK BROWN**, Auburn University

- **ANDREW BRUCKNER**, University of California – Santa Barbara

- **JACK CEDER**, University of California – Santa Barbara

- **ALEXANDER KECHRIS**, California Institute of Technology

- **ALEXANDER OLEVSKII**, Moscow Institute of Electronic Engineering

Other participants included:

Steve Agronsky, California Polytechnic State University – San Louis Obispo
Harold Atkinson, University of Windsor
Zoltán Buczolich, Eötvös Loránd University
Krzysztof Ciesielski, West Virginia University
George Cross, University of Waterloo
Udayan Darji, Auburn University
Michael Evans, North Carolina State University
Chris Freiling, California State University – San Bernardino
Richard Gibson, Columbus College
Russ Gordon,Whitman College
Don Hancock, Pepperdine University
Ralph Henstock, University of Ulster
Eric Howard, University of California – Davis

Paul Humke, St. Olaf College
Steve Jackson, University of North Texas
Alan Jian, University of California – Davis
Roy Johnson, Washington State University
Paul Keller, University of California –Santa Barbara
Lee Larson, University of Louisville
Bob Lewis, University of California – Santa Barbara
Arnold Miller, University of Wisconsin – Madison
John Morgan, California Polytechnic State University – Pamona
Richard O'Malley, University of Wisconsin – Milwaukee
Washek Pfeffer, University California – Davis
Taje Ramsamujh, Florida International University
Dan Rinne, California State University – San Bernardino
Glenn Schlee, University of North Texas
Don Stack, Loyola Marymount College
Lin Szpitun, Simon Fraser University
Andrezej Szymanski, Slippery Rock University of Pennsylvania
Brian Thomson, Simon Fraser University
John Walsh, TRW
Clifford Weil, Michigan State University
Wei-Chi Yang, Radford University.

At the Friday evening banquet the conference directors announced their selection of

LEE LARSON

of the University of Louisville as the 1990 recipient of the **ANDY** award. Congratulations Lee! The conference directors also presented some local awards – Los Angeles Lakers glasses to John Morgan and Ralph Henstock and a Rosa Maria sweatshirt to Howard Becker.

This year the **Exchange** editors asked each speaker at the conference to prepare an abstract of his presentation for inclusion in this issue. In the past, summaries of various lengths were printed. The move to shorter abstracts has been prompted by several factors, some of which are, naturally, financial. Reader reactions to this change are welcome. The abstracts follow the program of the meeting and appear in the order listed there. (An abstracts from Bob Lewis was not available at the time this issue was printed.) The questions raised in the Queries Session and at other times during the conference are included in the Queries Section of this issue of the *Real Analysis Exchange*.

PROGRAM
THE FOURTEENTH SUMMER SYMPOSIUM
ON REAL ANALYSIS

Tuesday, June 19th

7:00-9:00
Dean James Crum
Welcome Reception and Registration

Wednesday, June 20th

9:00-10:00
Howard Becker
Descriptive Set Theoretic Phenomena in Analysis and Topology

10:20-10:50
Udayan Darji
Density Topology and Completely Ramsey Sets

10:55-11:15
Arnold Miller
A Short Proof of a Theorem of Jasinski and Weiss

11:20-11:50
Taje Ramasamujh
The Family of Compact Porous Sets

1:30-2:30
Alexander Kechris
Glimm–Effros Dichotomy for Borel Equivalence Relations

2:45-3:05
Steve Jackson
Nonuniformization Results in the Projective Hierarchy

3:10-3:30
Bob Lewis
Level Structures of Virtually All Continuous Functions

3:35-??
Query Session

6:00-10:00
Really Big Party
Chris Freiling's Home

Thursday, June 21st

9:00-9:30
Washek Pfeffer
An Integral in Geometric Measure Theory

9:35-10:05
Zoltán Buczolich
Henstock and Lebesgue Integration

10:10-10:30
Wei–Chi Yang
Transfinite Induction and Integrals

10:50-11:10
Russ Gordon
Convergence Theorems for the Henstock Integral

11:15-11:35
Ralph Henstock
Integration by Parts in the SCP Integral

Friday, June 22nd

8:40-9:10
Richard O'Malley
First Return Selections and Block Selections

9:15-10:15
Andrew Bruckner
Three Methods of Constructing ω-Limit Sets

10:20-11:20
Jack Ceder
Some Results and Problems about ω-Limit Sets

11:25-11:45
Paul Keller
Countable Collections of ω-Limit Sets for Darboux Baire-1 Functions

1:30-2:30
Jack Brown
Differentiable-, Continuous-, and Derivative-Restrictions of Measurable Functions

2:45-3:05
Richard Gibson
Extendable Functions with a Dense Graph

3:10-3:30
Michael Evans
Comments on Approximate High Order Smoothness

3:35-3:55
Paul Humke
Proofs of the Uher and Freiling Covering Theorems

7:00-9:00
Banquet
Shandin Hills Golf Club

Saturday, June 23rd

9:00-10:00
Alexander Olevskii
Some Interpolation Problems in Real and Harmonic Analysis

10:20-10:40
Andrzej Szymanski
On Category Bases

10:45-11:05
Krzysztof Ciesielski
Refinements of Density and I-Density Topologies

11:10-11:30
Glenn Schlee
Extreme Point Selectors

11:35-11:55
Lee Larson
Parametric I-Approximate Derivatives are in Baire Class One

12:00-12:25
Eric Howard
(ε, η)-Approximating Partitions