

# Auburn University

Auburn University, Alabama 36849-3501

College of Sciences and Mathematics

Division of Mathematics  
Foundations, Analysis and Topology  
218 Parker Hall

Telephone (205) 826-4290

FOURTH ANNUAL SEMINAR-MINICONFERENCE IN

REAL ANALYSIS

Friday and Saturday, April 10-11, 1987

Friday Morning 9:00-9:55 Coffee, Registration, Information  
(Parker Hall 244)

FRIDAY MORNING SESSION (properties of real functions):  
PARKER HALL 217

9:55-10:15, J. B. Brown, Auburn Univ., "On the differentiability  
variant of Blumberg's theorem".

10:20-10:40, Ken Kellum, San Jose State U. and U. of Delaware,  
"Some questions concerning almost continuity",

10:45-11:05, Jerry Gibson, Columbus Coll., GA, "Concerning  
extension of connectivity functions".

11:10-11:30, Bert Garrett, Bryan, TX, "Connected and connectivity  
functions on dendrites".

11:35-11:55, Harvey Rosen, U. of Alabama, "Almost continuous  
functions with perfect roads but no Cantor Intermediate Value  
Property".

Lunch (Dutch Treat).

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FRIDAY AFTERNOON SESSION (real analysis and integration):  
PARKER HALL 217

1:10-1:30, Darwin Peek, Trinity U., TX, "Concerning Baire<sup>\*</sup>-1  
functions".

1:35-1:55, Roy A. Johnson, Washington State U., "Conditions for  
multiplication of Borel sets".

2:00-2:20, Dorothy Rutledge and R. E. Worth, Georgia State U. "A  
comparison of two generalized Riemann integrals."

2:25-2:45, Krzy Osztaszewski, U. of Louisville, KY, "On the  
relationship between the Henstock and the Lebesgue integral  
in the plane".

2:50-3:10, Lee Larson, U. of Louisville, KY, "Concerning monotonicity and approximate derivatives".

3:15-3:35, Michael Evans, N. C. State U., Assoc. Ed. Real Analysis Exchange, "More on L-points".

Refreshment Break (Parker Hall 244)

4:10-5:00, Casper Goffman, Prof. Emeritus Purdue Univ., Visiting Prof. San Diego State U., "Lusin-type theorems".

Short Break

5:10-5:40, Dr. John Ryff, Director of the Classical Analysis Program of the NSF, will make some comments concerning NSF funding in mathematics and answer questions.

6:00-9:00 Cookout at Jack Brown's house (food and beer provided).

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Saturday Morning 8:30-9:00 Coffee and Doughnuts (Parker Hall 244)

SATURDAY MORNING SESSION (Measure theory and descriptive set theory):

PARKER HALL 217

9:00-9:20, Andrzej Szymanski, Slippery Rock U., PA, and Silesian U., Poland, "Category bases and low density".

9:25-9:45, Richard O'Malley, U. of Wisconsin, Milwaukee, Assoc. Ed. Real Analysis Exchange, "Croft's function".

9:50-10:10, P. Krantz, U. of Mississippi, "Extensions of operators and measures via the Sandwich Theorem".

10:15-10:35, P. Mikusinski, U. of Central Florida, "Extension of measures:."

10:40-11:00, Olev Kallenberg, Auburn U., Ed. Board of Probability Theory and Related Fields, "An elementary proof of Kolmogorov's extension theorem for measures on product spaces".

11:05-11:55, Dan Mauldin, N. Texas State U., Real Variables Ed. of Proceedings of the Amer. Math. Soc., "Hausdorff measures and dimension".

Lunch (Dutch Treat).

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SATURDAY AFTERNOON SESSION (complex, harmonic, and functional analysis):

PARKER HALL 217

1:10-1:30, G. DeSouza, Auburn U., " $B^p$  space and almost everywhere divergent Fourier series".

1:35-1:55, Daniel Waterman, Syracuse U., "Almost everywhere convergence of double Fourier series".

2:00-2:20, Gary Sampson, Auburn U., "On convolution operators".

2:25-2:45, Steve Bloom, Siena College, NY, "BMO multipliers".

2:50-3:10, Craig Nolder, Florida State U., "Generalizations of a theorem of Hardy and Littlewood".

3:15-3:35 Ronald Kerman, Brock U., St. Catherines, Ontario, "Carleson measures and multipliers of Dirichlet-type spaces".

3:40-4:00, Togo Nishiura, Wayne State U., "Recent results in Blaschke products".

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4:20, Transportation leaves to deliver participants who have Sunday flights to LaQuinta Inn in Atlanta. We will provide transportation that evening to downtown Atlanta restaurant for (Dutch Treat) dinner and back to LaQuinta. LaQuinta has free transportation to the airport.