Auburn University

Auburn University, Alabama 36849-5310

College of Sciences and Mathematics

Department of Mathematics 221 Parker Hail

SIXTH ANNUAL AUBURN MINICONFERENCE ON

Telephone: (334) 844-4290 FAX: (334) 844-6555

REAL ANALYSIS

Friday and Saturday, April 7-8, 1989

Spansored by NSF

Friday Morning 8:30-8:55 Coffee, Doughnuts, Registration, Information (Parker Hall 244).

FRIDAY MORNING SESSION (PARKER HALL 250):

- 8:55-9:00, Opening Remarks, Jack Brown, Auburn University.
- 9:00-9:20, James Foran, Univ. of Missouri, Kansas City, "Radon-Nikodym derivative in Euclidean space".
- 9:25-9:45, Piotr Mikusinski, Univ. of Central Florida, "On doubly stochastic measures".
- 9:50-10:10, Krzysztof Ciesielski, Methodist Coll., Fayetteville, NC, "Algebraically invariant extensions of sigma-finite measures on Euclidean spaces".
- 10:15-10:35, John T. Walsh, San Bernardino, CA, "Marczewski sets, measure, and the Baire property, II".
- 10:40-11:00, Jerry Gibson, Columbus Coll. (GA), "On the Besicovitch covering constant".

MOVE TO PARKER HALL 217:

11:10-12:00, Dorothy Maharam Stone, Univ. of Rochester and Northeastern Univ. (MA),

"Some applications of ergodic theory in analysis".

------ Lunch (Dutch Treat) ------

FRIDAY AFTERNOON SESSION (PARKER HALL 217):

- 1:30-1:50, Paul Humke, St. Olaf College, Northfield, MN, "Monoton-icity theorem for generalized Riemann derivatives".
 - 1:55-2:15, Michael J. Evans, N. Carolina State Univ., "Approximate high order smoothness".
 - 2:20-2:40, Krzysztof Ostaszewski, Univ. of Louisville (KY), "I-density continuous functions".

- 3:10-3:30, Chris Freiling, Calif. State Univ. San Bernardino, "Not CH. and the co-countable symmetric derivative".
- 3:30-4:05. Refreshment Break (Parker Hall 244)
- 4:10-5:00, Cliff Weil, Michigan State Univ.,

"Generalized derivatives of higher order".

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

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

SATURDAY MORNING SESSION (PARKER HALL 217):

- 9:00-9:20, Hao-Xuan Zhou, visiting Auburn Univ. from Sichuan Univ. (P. R. C.), "Results related to Erdos's problem on sets of positive measure.
- 9:25-9:45, Andrzej Szymanski, Slippery Rock Univ. (PA), "On Baire spaces".
- 9:50-10:10, George Golightly, Jacksonville, TX, "Lidstone series, converging absolutely".
- 10:15-10:35, Craig A. Nolder, Florida State Univ., "Norm inequalities for solutions of elliptic equations in divergence form".
- 10:40-11:00, Michel Lapidus, Univ. of Georgia, "The Riemann zeta function and the Weyl-Berry conjecture for fractal drums".
- 11:10-12:00, Washek Pfeffer, Univ. of California, Davis,

"The Gauss-Green Theorem".

Lunch (Dutch Treat).

SATURDAY AFTERNOON SESSION (PARKER HALL 217):

- 1:30-1:50, Krystyna Kuperberg, Auburn Univ., "Homeomorphisms of the plane and fixed points".
- 1:55-2:15, Ken Kellum, San Jose State Univ. (CA), "Uniform limits of connected and almost continuous functions".
- 2:20-2:40, Harvey Rosen, Univ. of Alabama, "G Darboux graphs".
- 2:45-3:05, Bert Garrett, Tennessee State Univ., "Solutions of two problems of Gibson's concerning Darboux functions".