
ADDITIVE NUMBER THEORY CONFERENCE

November 17 – 20, 2004

University of Florida, Gainesville, FL 32611

SCHEDULE

Wednesday, November 17, 2004

Location. All Wednesday lectures are in Little Hall Room 339, also known as the Atrium.

7:30 - 4:00pm

Registration near Little Hall Room 339 in reception area of the Math Department

8:20 - 8:30am

Jack Sabin, Associate Dean, College of Liberal Arts & Sciences

Opening remarks

8:30 - 9:20AM

George Andrews, Pennsylvania State University

Partitions with Short Sequences and Ramanujan's Mock Theta Functions

9:30 - 10:00AM

BREAK

10:00 - 10:20AM

Bruce C. Berndt, University of Illinois

Ramanujan's congruences for the partition function modulo 5, 7, and 11

10:30 - 10:50AM

Christian Krattenthaler, Universite Claude Bernard, Lyon

Hypergeometrics and linear forms of zeta values

11:00 - 11:20AM

Ae Ja Yee, Pennsylvania State University

Partitions with difference conditions and Alder's conjecture

11:30 - 11:50AM

Stephen C Milne, Ohio State University

New Lambert series formulas for 12 and 20 squares, and multiple basic hypergeometric series

12:00 - 12:20PM

Hamza Yesilyurt, University of Florida

Shifted and Shiftless Partition Identities

12:30 - 2:00PM

LUNCH

2:00 - 2:50PM

Ken Ono, University of Wisconsin

Values of modular functions

3:00 - 3:20PM

Kathrin Bringmann, University of Wisconsin

On Fourier coefficients of Siegel cusp forms with small weight

3:30 - 3:50PM

Matt Boylan, University of Illinois

Arithmetic of the partition function

4:00 - 4:20PM

Scott Ahlgren, University of Illinois

Fourier coefficients of half-integral weight modular forms modulo p

4:30 - 4:50PM

Drew Sills, Rutgers University

Rogers-Ramanujan-Bailey Type Identities

5:00 - 5:20PM

Ole Warnaar, The University of Melbourne, Australia

Hall-Littlewood functions and the A_2 Rogers-Ramanujan identities

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Thursday, November 18, 2004

Location. All Thursday lectures are in Little Hall Room 339 (The Atrium) except Bruce Berndt's Special History Lecture which will be given in Little Hall Room 109.

8:30 - 9:20AM

Jean-Marc Deshouillers, University of Bordeaux II

Subset sums modulo a prime

9:30 - 10:00AM

BREAK

10:00 - 10:20AM

Andras Sarkozy, Eotvos Lorand University, Budapest

On arithmetic properties of summands of partitions

10:30 - 10:50AM

Jean-Louis Nicolas, Universite Claude Bernard, Lyon

Partitions without small parts

11:00 - 11:20AM

Claus Bauer, Dolby Labs

Hua's theorem on sums of five prime squares in arithmetic progressions

11:30 - 11:50AM

Chaohua Jia, Academia Sinica, Beijing, P. R. China

On Goldbach's Problems

12:00 - 12:20PM

Christian Mauduit, CNRS, Marseille

On the repartition of some q -additive functions

12:30 - 1:30PM

LUNCH

1:30 - 2:20PM

Basil Gordon, UCLA

The return of the mock theta functions

2:25 - 2:45PM

Richard McIntosh, University of Regina

Mordell integrals and mock theta functions

3:00 - 3:50PM

SPECIAL HISTORY LECTURE

Room: Little Hall 109

Bruce C. Berndt, University of Illinois

Ramanujan: his life, friends, notebooks, and identities for the Rogers-Ramanujan functions

4:00 - 4:30PM

REFRESHMENTS outside Little Hall Room 339 (Atrium)

4:30 - 4:50PM

Anne Schilling, University of California, Davis

$X=M$ for symmetric powers

5:00 - 5:20PM

Scott Parsell, Butler University

Some higher-dimensional additive problems

8:00 - 10:00PM

PARTY at the home of Krishna and Mathura Alladi

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Friday, November 19, 2004

Location. All Friday lectures are in Little Hall Room 339, also known as the Atrium.

8:30 - 9:20AM

Melvyn Nathanson, Lehman College (CUNY)

Sidon sets and representation functions of additive bases for the integers

9:30 - 10:00AM

BREAK

10:00 - 10:20AM

Renling Jin, College of Charleston

Recent Results on Inverse Problems

10:30 - 10:50AM

Georges Grekos, Université Jean Monnet, St Etienne, France

On weighted densities

11:00 - 11:20AM

Jose Antonio Perdigao Dias da Silva, Universidade de Lisboa, Portugal

Weak Sidon Sets and Matroid Theory

11:30 - 11:50AM

S. D. Adhikari, Harish Chandra Research Institute, Allahabad

Some Zero-sum Problems in Combinatorial Number Theory

12:00 - 12:20PM

Jukka Pihko, University of Helsinki, Finland

The Musketeers of Mathematics: Portrait of a Team

12:30pm: GROUP PHOTO in front of Little Hall

12:30 - 2:00PM

LUNCH

2:00 - 2:50PM

James Lepowsky, Rutgers University

Vertex operator algebras and partitions

3:00 - 3:20PM

Stefano Capparelli, University La Sapienza, Rome

Principal subspaces of standard modules

3:30 - 3:50PM

Jim Haglund, University of Pennsylvania

A Combinatorial Formula for the Macdonald Polynomials

4:00 - 4:20PM

David M. Bradley, University of Maine

On q -Analogues of Multiple Zeta Values and other Multiple Harmonic Series

4:30 - 4:50PM

Dennis Stanton, University of Minnesota
(q,t)-binomial coefficients

5:00 - 5:20PM

Alex Berkovich, University of Florida
Infinite products with nonnegative coefficients

7:30 - 10:00PM

BANQUET at the Sovereign Restaurant

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Saturday, November 20, 2004

Location. There are two parallel sessions on Saturday. One session is in Little Hall Room 339 (The Atrium). The other session is in Little Hall Room 125.

8:30 - 8:50AM (ROOM: LIT 339)

Jeremy Lovejoy, LaBRI, Université Bordeaux I
Extending partition theorems of Schur and Gollnitz to overpartitions

8:30 - 8:50AM (ROOM: LIT 125)

Jayce Getz, University of Wisconsin
Systems of orthogonal polynomials arising from the modular j -function (joint work with S. Basha, H. Nover, and E. Smith)

9:00 - 9:20AM (ROOM: LIT 339)

Sylvie Corteel, CNRS University of Versailles
An iterative bijective approach to generalizations of Schur's theorem

9:00 - 9:20AM (ROOM: LIT 125)

Paul Jenkins, University of Wisconsin
Kloosterman sums and traces of singular moduli

9:30 - 9:50AM (ROOM: LIT 339)

Karl Mahlburg, University of Wisconsin
A New Approach to Cranks

9:30 - 9:50AM (ROOM: LIT 125)

Jennifer Morse, University of Miami
Facts and figures about k -Schur functions

10:00 - 10:20AM (ROOM: LIT 339)

O-Yeat Chan, University of Illinois
Some asymptotics of cranks

10:00 - 10:20AM (ROOM: LIT 125)

Alexander Moreto, University of Valencia, Spain
Some problems on partitions that arise from representation theory

10:30 - 10:50AM (ROOM: LIT 339)
Brendan Younger, University of Wisconsin
A New Proof of the Ramanujan Congruences for the Partition Function

10:30 - 10:50AM (ROOM: LIT 125)
B. Ramakrishnan, Harish Chandra Research Institute, Allahabad
Lacunarity of Two-Eta-Products

11:00 - 11:20AM (ROOM: LIT 339)
Holly Swisher, University of Wisconsin
Stanley's partition function and its relation to $p(n)$

11:00 - 11:20AM (ROOM: LIT 125)
Antun Milas, University at Albany, SUNY
Superconformal Characters and Weber Functions

11:30 - 11:50AM (ROOM: LIT 339)
Padma Vathamma, University of Mysore, India
Analytic proof of a partition identity involving three parameters

11:30 - 11:50AM (ROOM: LIT 125)
Angel Kumchev, University of Texas at Austin
Exceptional sets in the Waring-Goldbach problem

12:00 - 12:20PM (ROOM: LIT 339)
Guoce Xin, Brandeis University
On MacMahon's partition analysis

12:00 - 12:20PM (ROOM: LIT 125)
Shalom Eliahou, Universite du Littoral Cote d'Opale, Calais
Optimally small sumsets in groups

12:30 - 2:00PM
LUNCH

2:00 - 2:20PM (ROOM: LIT 339)
Heekyoung Hahn, University of Rochester
Convolution sums of functions on divisors

2:00 - 2:20PM (ROOM: LIT 125)
Jaclyn Anderson, University of Wisconsin
An Asymptotic Formula for the t -core Partition Function and a Conjecture of Stanton

2:30 - 2:50PM (ROOM: LIT 339)
Soon-Yi Kang, KIAS, Korea
The continuous symmetric Hahn polynomials found in Ramanujan's lost notebook

2:30 - 2:50PM (ROOM: LIT 125)
Jeremy Rouse, University of Wisconsin
Vanishing and Non-Vanishing of Traces of Hecke Operators

3:00 - 3:20PM (ROOM: LIT 339)

Jaebum Sohn, Yonsei University, Seoul, Korea

Some continued fractions in Ramanujan's lost notebook

3:00 - 3:20PM (ROOM: LIT 125)

James Sellers, Pennsylvania State University

A Connection Between Binary Partitions and Non-Squashing Partitions

3:30 - 3:50PM (ROOM: LIT 339)

C. Adiga, University of Mysore, India

Sums of squares and sums of triangular numbers and their relationship

3:30 - 3:50PM (ROOM: LIT 125)

Dennis Eichhorn, Cal St Hayward

Partition functions do not concentrate too heavily modulo M

4:00 - 4:20PM (ROOM: LIT 339)

Song Heng Chan, University of Illinois

On Ramanujan's ${}_1\psi_1$ summation formula and Sears' transformations.

4:00 - 4:20PM (ROOM: LIT 125)

Kevin O'Bryant, University of California, San Diego

The Parity of the Partition Function

4:30 - 4:50PM (ROOM: LIT 339)

Pierre Mathieu, Physics Department, Laval University

Superpartitions and symmetric functions in superspace