2-Day MAA Short Course

at the Madison MathFest
Concourse Hotel, Madison, Wisconsin
August 4–5, 2001

THE LIFE AND LEGACY OF RAMANUJAN

Part 1: Saturday, August 4, 1:00 p.m. – 5:00 p.m.
Part 2: Sunday, August 5, 9:00 a.m. – 5:00 p.m.

Organized by KENNETH ONO, University of Wisconsin. This course is devoted to the inspiring story of Ramanujan and is a brief and elementary introduction to his works and legacy to number theory. The course is comprised of the following:

I. The Ramanujan Story: Presentations will include photos, excerpts of Ramanujan's letters and writings, and detailed "oral history" by the world's leading experts on Ramanujan's life.

II. Ramanujan's Legacy in Number Theory: Presentations will focus on Ramanujan's discoveries in number theory. These will include lectures on Ramanujan's celebrated work on partitions; formal power series; and other works, such as his work on the approximation of Pi.

III. Participants will be guided through proofs of some of Ramanujan's most famous discoveries. See the magic of Ramanujan revealed before your eyes!

PROGRAM

SATURDAY, AUGUST 4:
A Snapshot of Ramanujan's Discoveries and Legacy, BRUCE BERNDT, University of Illinois, Urbana-Champaign
Ramanujan's Work on Partitions and Allied Functions, KEN ONO, University of Wisconsin-Madison
Demonstration: A Magical Identity and Some Partition Congruences, GWYNNETH COOGAN, University of Wisconsin-Madison
The Life of Ramanujan, BRUCE BERNDT, University of Illinois, Urbana-Champaign

SUNDAY, AUGUST 5:
The Rogers-Ramanujan Identities, GEORGE ANDREWS, Penn State University
Demonstration: Q-Series Identities…?, JEREMY LOVEJOY, University of Wisconsin-Madison
Some Sums of Ramanujan and What We Can Do with Them, DICK ASKEY, University of Wisconsin-Madison
Ramanujan's Lost Notebook, GEORGE ANDREWS, Penn State University
Some Recent Threads of Ramanujan's Legacy, SCOTT AHLGREN, University of Illinois, Urbana-Champaign
Tantalizing Questions and Prospects for the Future, AHLGREN, ANDREWS, ASKEY, BERNDT, and ONO