



PURDUE UNIVERSITY

Department of Mathematics Colloquium

Speaker: Professor Bruce Berndt, University of Illinois at Urbana-Champaign
Title: "Ramanujan's Lost Notebook"
Date: Tuesday, December 5, 2006
Time: 4:30 P.M.
Place: MATH 175

Abstract

Srinivasa Ramanujan, generally regarded as the greatest mathematician in Indian history, was born in 1887 and died in 1920 at the age of 32. Most of his work was recorded without proofs in notebooks. In the spring of 1976, while searching through papers of the late G. N. Watson at Trinity College, Cambridge, George Andrews found a sheaf of 138 pages of Ramanujan's work. In view of the fame of Ramanujan's "ordinary" notebooks, Andrews naturally called this collection of sheets Ramanujan's "lost notebook." This work, comprising about 650 results with no proofs, arises from the last year of Ramanujan's life and represents some of his deepest work. After a brief history of Ramanujan's life and notebooks, the history and origin of the lost notebook will be given. The remainder of the lecture will be devoted to a survey of some of the most interesting entries in the lost notebook. These include claims in q -series, theta functions, continued fractions, integrals, partitions, and other infinite series.

Refreshments will be served in the Math Library Lounge, 4:00 P.M.