THE UNIVERSITY



OF HONG KONG

Institute of Mathematical Research Department of Mathematics

COLLOQUIUM

Ramanujan's Lost Notebook

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Date: February 16, 2011 (Wednesday)

Time: 4:00 – 5:00pm

Venue: Room 210, Run Run Shaw Bldg., HKU

Abstract

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 in the handwriting of Srinivasa Ramanujan, generally regarded as India's greatest mathematician. In view of the fame of Ramanujan's earlier notebooks, Andrews naturally called these papers 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.

First, we provide a history of the lost notebook. Second, a general description of the topics found in the lost notebook will be provided. For some of the topics, such as ranks and cranks of partitions, we offer some details. The third portion of the lecture will be devoted to a more detailed discussion of one of the topics prominently addressed in the lost notebook, namely continued fractions.

All are welcome