

MATHEMATICAL SCIENCES LECTURE SERIES

College of Liberal Arts & Sciences

George E. Andrews

The Pennsylvania State University

*The joy of collaboration - why pure mathematical scientists
should not mind their own business*



Date: Monday, February 14, 2005

Refreshments: Served at 3:30pm

Lecture: 4:05 – 4:55pm

Location: Keene Faculty Center, Dauer Hall

Abstract:

In my misspent mathematical youth, I heartily subscribed to G.H. Hardy's dictum that "If useful knowledge is... knowledge which is likely, now or in the comparatively near future, to contribute to the material comfort of mankind,... then the great bulk of higher mathematics is useless." However, my mid-career collaborations with physicists, computer scientists and dynamical systems people have convinced me that pure mathematics is truly enriched when it interacts with other fields. In this talk I shall discuss some of the philosophy behind my current views. I shall then flesh out this overview with a discussion of some collaborations of mine that not only aided others in other fields but also greatly assisted me in my own researches by pointing to novel questions and methods.

George Andrews, one of the world's most eminent mathematicians, is Evan Pugh Professor of Mathematics at the Pennsylvania State University and a member of the National Academy of Sciences. He is a well known number theorist and is the premier authority in the theory of partitions and q -hypergeometric series. He has written over 250 research papers. He is famous for the discovery of Ramanujan's Lost Notebook, which he is currently editing with Bruce Berndt of the University of Illinois.

This Lecture Series is sponsored by The Mathematical Sciences Committee. The Committee seeks to identify emerging scientific fields that have strong mathematical components; promote education in these fields; encourage and support collaborative research; coordinate responses to interdisciplinary proposal solicitations; and explore more formal organizational structures that will bridge the mathematical sciences and their applications.