IMS SCHOOL LECTURE

Mathematical Modelling of Parasitic Diseases

Speaker: **Professor Andrew Barbour**
University of Zürich, Switzerland
**Date:** **Thursday, 21 August 2003**
Time: **3:00pm - 4:00pm**
Venue: **LT 2**
Victoria Junior College
20 Marine Vista
Singapore 449035

Abstract

Mathematical arguments have been used to help in fighting disease ever since the work of Daniel Bernoulli in the early 1700's. A common theme nowadays is to use mathematical models to predict the efficacy of competing public health measures, such as various immunization strategies, in relation to their probable cost. In this talk, the speaker illustrates that modelling can be effective even at a more basic level. A pair of simple differential equations was used to make a discovery about the natural history of a widespread parasitic infection.
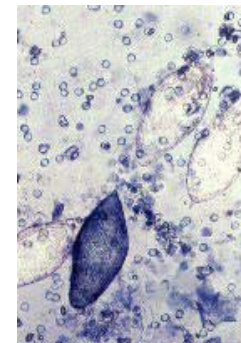
About the Speaker

Andrew Barbour is currently Professor of Biomathematics at the University of Zürich and a Fellow of the Institute of Mathematical Statistics. His research interests include mathematical epidemiology (both modelling and data analysis), branching and population processes and computational molecular biology. He has published over 100 papers and is an associate editor of international journals such as the Annals of Applied Probability and Random Structures and Algorithms.

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