MSRI-Evans Talk

Monday, 4:15–5:00pm, 60 Evans

Dec. 6 Aderemi Kuku, MSRI

Mathematical Sciences and the Development of Africa

The aim of this talk is to provide some information on the current state of mathematical research and education in Africa as well as discuss consequences for the development of the continent.

The talk starts with general information on the African continent e.g. area, population, resources, political, geographical and linguistic subdivisions, etc. Next we discuss the educational systems, especially mathematical education systems as well as some associated mathematical institutions and organizations.

Next we discuss the nature and structure of mathematics in its various ramifications as well as the place and influence of mathematics vis-à-vis other areas of science and technology with the aim of highlighting how Africa has so far fared. We then provide a brief review of available mathematical expertise on the continentby subregions and identify some weak areas in the continent. Finally we highlight the problems facing mathematical research and education on the continent and then point the way forward towards containing and minimizing the problems.

Aderemi Kuku was a Professor of Mathematics at the University of Ibadan, Nigeria for many years, during which period he was President of the African Mathematical Union (AMU) for nine years (1986-95). As President of AMU, his responsibilities included the organization and coordination of various mathematical education and research activities all over the continent. He was also one of the founders of Pan-African Union for Science and Technology (PUST), and African edition of ICSU.

While at Ibadan, he was Head of Mathematics Department (1983-86), and Dean of Graduate School (1986-90). He was a Professor of Mathematics at the International Centre for Theoretical Physics (ICTP) (1995-2003) and has held visiting professorships at various universities and research centres in North America, Europe and Asia. He is a member of Third World Academy of Sciences; European Academy of Arts, Science, and Humanities; African Academy of Sciences and Nigerian Academy of Sciences. Moreover, he served for eight years (1986-94) as a member of the International Mathematical Union Commission on Development and Exchange (IMU-CDE). He is currently a visiting Research Professor at MSRI.