

FACULTY OF EDUCATION, UNIVERSITY OF CAMBRIDGE  
LENT TERM 2004

## CAMBRIDGE COLLOQUIA IN MATHEMATICS EDUCATION

Monday 2nd February 2004 at 5.30 p.m., Room 205, Mary Allan Building, Hills Road

Toni Beardon, University of Cambridge

### CHALLENGES FOR MATHEMATICS EDUCATION IN SOUTH AFRICA.

Following a six-month consultation exercise and feasibility study, Toni is setting up a new mathematics education project for South Africa, a joint initiative of the universities of the Western Cape, Cape Town, Stellenbosch and Cambridge. A programme of videoconference learning, linking schools in the UK and SA, will be expanded, and NRICH learning resources will be published on CDs and translated into African languages. There will be a roadshow visiting schools in remote rural areas. All these activities will be linked to the professional development of teachers and to research related to several issues, including: how language and code switching affect the learning of mathematics; ICTs and their educational implications; the use of online and CD learning materials in teaching and independent learning; online learning communities and peer assisted learning.

Monday 8th March 2004 at 5.30 p.m., Room 205, Mary Allan Building, Hills Road

Janet Ainley, Liz Bills and Kirsty Wilson, University of Warwick

### PURPOSEFUL ALGEBRAIC ACTIVITY

Purposeful Algebraic Activity, an ESRC funded project, is a longitudinal study of the development of pupils' algebraic activity in the early years of secondary schooling. The project aims to explore the potential of spreadsheets as tools in the introduction to algebra and algebraic thinking, making links to both the learning and teaching of arithmetic, and the development of traditional school algebra. In collaboration with primary and secondary teachers, we have designed and implemented a teaching programme of purposeful spreadsheet-based tasks. We have used a range of data collection methods to build a picture of pupils' development, including detailed lesson observations and interviews with target groups of pupils. In this seminar, we will discuss our empirical findings and invite feedback from colleagues.

Tea and coffee will be available before each meeting. All are very welcome.

For directions to the Mary Allan Building (Homerton College site) and any other information, contact Tim Rowland at [tr202@cam.ac.uk](mailto:tr202@cam.ac.uk)