

FACULTY OF EDUCATION, UNIVERSITY OF CAMBRIDGE

EASTER TERM 2009

## CAMBRIDGE COLLOQUIA IN MATHEMATICS EDUCATION

Monday 11th May 2009 at 5.00 p.m., Room 205, Mary Allan Building, Hills Road

Cathy Smith, Homerton College, Cambridge

### CHOOSING MORE MATHEMATICS: WORKING FOR HAPPINESS?

My research examines the experiences of A level students who study further maths outside their school timetable via the Further Maths Network. My data comes from observations, interviews and e-mail questionnaires with 24 students in three sites. I examine how the students use the discursive positionings of mathematics and further mathematics within their work on identity: what Foucault calls their 'practices of the self'. Here I focus on how they negotiate two contemporary requirements: to be happy in your work, and to work on being happy. I suggest learning practices that contribute to positioning themselves as successful students.

FRIDAY 19th June 2009, 1.00 p.m.(13:00), Room 205, Mary Allan Building, Hills Road  
*[A light lunch will be on offer in Room 205 from 12:30 – all are welcome]*

Nathalie Sinclair, Simon Fraser University, Canada

### SURFACE SIGNS OF REASONING

In this talk, I will explore the forms of expression that some students employed while working in pairs on geometric tasks in a computer environment. In particular, I examine the students' use of logical terms such as 'if' and 'because', and on their use of language to express their attitude to what is being claimed as they try to discuss ideas with their partner. In my analysis of this speech data I bring together Toulmin's argumentation scheme, the reasoning heuristic that Peirce called 'abduction', and the linguistic notion of 'hedging'. I will present a Peircean and a Toulmin account of two episodes. I conclude that the presence of hedges (related to Toulmin's 'modal qualifiers') is a key surface feature in the identification of student abductions.

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

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