Report of BCME-5

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Although the population at large finds this surprising, there are plenty of occasions when mathematics gives pleasure. One such was the opening plenary address by Hyman Bass and Deborah Ball to BCME-5. This included and intriguing video clip in which a school class in the USA were discussing odd and even numbers and formulating their own conjectures, with one young lad tenaciously defending his position that 6 is both odd and even. Truly the convergence to mathematical understanding is neither absolute nor uniform.

The British Congress of Mathematics Education, however, is not just about sitting in as an audience receiving the wisdom; you have to work. Apart from the three plenary sessions, the structure included a wide range of interest sessions, in smallish groups with active discussion in which participation was easy, and "discussion groups" in which keeping silent was not an option.

There was something for everybody at BCME-5, and "everybody" included representatives from all stages of mathematics education. Despite the obvious differences, it can be salutary to see to what extent the difficulties in mathematics education persist from one level to another. For me the paper on "Belief overhang: the Transition from School to University" by Katrina Daskalogianni and Adrian Simpson was a fascinating account of a problem known to all of us in higher education, where students do not adapt their ideas to the way mathematics is taught and learned at university. The effect of this overhang is not only belief in the students' earlier ways of working but disbelief in anything else.

Like any good conference, a lot of business was done over coffee and in the bar, but beware that our discussion group involved "homework". We coped!

The surroundings at Keele form a very pleasant oasis of calm in a busy world, and the arrangements for the congress were excellent. My one criticism is that the material of greatest interest to those from higher education were largely towards the beginning, and at conflicting times. I had to miss some because of the clashes, yet towards the end there were times when the items on offer were of less interest to me.

BCME-5 was a stimulating conference. I shall try to lose the weight I gained before the next one.

Proceedings of the 2001 CAME Symposium

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The second symposium of the Computer Algebra in Mathematics Education (CAME) organisation was held at the Freudenthal Institute in the Netherlands in July. The theme of the event was *Communicating Mathematics through Computer Algebra Systems*, with four special topics under discussion:

- CAS and techniques,
- CAS and teachers,
- The role of theoretical frameworks on current CAS research into students' learning
- The explicitness and expressiveness of a CAS environment

Plenary papers were given by an distinguished international group of speakers: Michèle Artigue (University of Paris), Neil Challis (Sheffield Hallam University), Koeno Gravemeijer (Freudenthal Institute, The Netherlands), Kathleen Heid (Pennsylvania State University), Kenneth Ruthven (University of Cambridge), Kaye Stacey (University of Melbourne), Michal Yerushalmy (Haifa University, Israel), and Rose Mary Zbiek (University of Iowa).

The texts of these papers, and summaries of the subsequent group discussions, can be viewed on the Symposium Proceedings web page:
http://ltsn.mathstore.ac.uk/came/events/freudenthal

The Symposium organisers would like to acknowledge Texas Instruments and the Netherlands National Research Council (Program Board for Educational Research) for sponsorship of the event.

CAME is an open, international organisation for anyone interested in the use of computer algebra software at any level of mathematics education.

For further information, visit the CAME web site:

http://ltsn.mathstore.ac.uk/came/