

Early Career Mathematicians' Conference Report

The 13th IMA Early Career Mathematicians' (ECM) Conference was held on Saturday, 20 November 2010, at De Morgan House, in London. The conference was organised by our out-going Conference Leader, Georgina Bygott CMath MIMA, with the invaluable support of Lizzi Lake and the IMA conference office. The conference was well attended by over 40 delegates, including quite a number of representatives from the Mathematics Societies at the Universities of Derby and Leicester.

The conference was opened by Sarah Eyles (licentiate member of the Chartered Institute of Personnel and Development) who was our trainer for the morning workshop titled *Facilitation – a skill for life!*. The aim of the workshop was to help the participants develop against IMA competencies required for Chartered Mathematician status. As the title states, the workshop also aimed to equip our delegates with a very useful life-skill. Sarah started off by giving out four different types of chocolates in order to divide us into groups. In her usual engaging and energetic style, she then took us through a mixture of short-burst teaching sessions, group exercises and interactive sessions. By taking part, we learnt and practiced many skills, including how to increase participation, resolve conflicts, ask effective questions and actively listen to others. We also learnt how to plan, open, run and close a successful facilitation session, and how important our body language is in the entire process. All of the participants received an information pack with more details on everything we learnt and more, as well as an IMA certificate of attendance that will count towards our Chartership applications.



**Delegates enjoying an interactive lunch.
(Photo taken by Lizzi Lake)**

At the end of the workshop we broke for lunch, which was very interactive. There was a great buzz of enthusiasm in the room during lunch, while we caught up with old friends and made lots of new ones. As is now customary during the ECM conferences, the ECM committee had a face-to-face meeting during the latter part of the lunch break to coordinate our various activities.

Rosie Robison from Cambridge University opened the afternoon session with an interesting talk about her PhD Thesis on the noise of fuel efficient aircraft engines. She focused on the noise of the new Advanced Open Rotor (AOR) engine arising from the interaction between propeller blades and atmospheric turbulence, which she explained with the aid of some great diagrams of different aircraft engines. At the end

of her talk, Rosie also informed us about the up-coming Young Researchers in Mathematics conference will be held at the University of Warwick from 14 to 16 April 2011.



**Aoife Hunt, presenting her video simulations.
(Photo taken by Lizzi Lake)**

Next we were treated to some interesting videos of simulations showing the evacuation of people with reduced mobility, by Aoife Hunt from Greenwich University. Aoife delivered a very interactive talk about her PhD Thesis, which involves the development of algorithms to simulate hospital evacuation. This was followed by a very entertaining presentation by Dr David Bedford from Keele University, which started off by working out the answer to the Tuesday Boy Problem (If I have two children and one is a boy born on a Tuesday, then what is the probability that I have two boys?). However, this presentation went on to be more and more entertaining, during which he introduced us to MathsJam (www.mathsjam.com) and phrases such as 'Here's looking at Euclid!', and even showed us how to square a circle!



**Peter Rowlett MIMA and Samuel Hansen record their 'Math/Maths Podcast' live before an audience at MathsJam 2010.
(Photo taken by Tony Mann)**

Next up were two of our more tech-savvy colleagues Samuel Hansen (University of Nevada, Las Vegas) and Peter Rowlett (University of Birmingham), who introduced us to the world of Mathematical podcasting. Samuel and Peter performed a great double act, sharing their experiences of Mathematical podcasting with us in a very

entertaining style. They also divulged some of the tricks of the trade, and encouraged us all to try it out.

The fun and exciting day, was brought to a close with an update from the newly elected ECM committee. We updated the delegates on our various activities, and as usual made an appeal for support, and for more ideas on what our members would like us to do for them. The response we received was excellent and we are incorporating these ideas into our plan for the year.

After the conference, a group of us went out for an impromptu dinner together at a nearby restaurant. This was great fun and everyone enjoyed the dinner very much. Therefore, in future a post-conference dinner will be a regular feature of the ECM conferences.

Everyone is now looking forward to the next Early Career Mathematicians' conference, that will be held at the University of Leicester on 21 May 2011. Make sure you keep the date free, as our newly elected Conference Leader Ravi Robin Gajria AMIMA has pulled together another fantastic program for us.

The programme includes a Career Planning workshop, delivered by Adrian Hamilton CMATH FIMA, to provide the participants with some practical skills they can use straight away to manage their careers and enable them to prepare their own career marketing campaign with confidence in their future. The workshop will be another interactive and engaging one, covering how to deal with CVs, job applications, interviews and much more. The ECM committee and I hope to see you there, and we hope you can stay on for the post-conference dinner as well! □

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