

Reflective report on Young Researchers in Mathematics

By Martine J. Barons

On behalf of the YRM 2011 organising Committee: David Holmes, Martine Barons, Sara Maloni, Paul Chleboun, Barinder Banwait, Sebastian Helmsdorfer, Jamie Luo, Steven Hill

General introduction:

YRM 2011 has been a great success, with over 190 student delegates attending and 93 student talks covering areas ranging from Mathematical Biology to Number Theory. In addition, 14 of the UK's most eminent mathematicians attended to give keynote and plenary talks, and the conference is on track to move to Bristol University in 2012. A major aim of YRM is to facilitate networking and collaboration between young researchers. To attempt to measure our success in this area we asked our delegates to complete a feedback form. Around half said that they had had conversations which had helped their research, and nearly 40% said they had met other researchers with whom they might collaborate in future. Particular comments included 'Discussing my work with others inspired me to prove an extension' and 'we had a very interesting conversation about gene regulatory networks'; more examples can be found on our website.

Several keynote speakers commented on the very high standard of the student talks.

The structure of the conference works well; students have commented that the length of the talks (40 minutes) is 'perfect, long enough to get into the details of my work'. Dividing the conference into 13 tracks with up to 8 running in parallel allows talks to be focused and subject-specific, and results in 'very fruitful feedback'.

Although we only advertised YRM within the UK as we were unable to subsidise accommodation or travel for other students, approximately 30 students from other countries including the US and Australia attended.

We have succeeded in attracting 5 new sponsors to the conference this year, enhancing the ability of YRM to be self-sustaining and institution-independent; delegates expressed enthusiasm for the 2012 event in Bristol.

How it went

The committee held a post-event debrief and listed both the things that went well, and the things that, with the benefit of hindsight, would have been done differently.

It was felt that we had worked very effectively as a team, resolving our differences amicably without any serious disagreements. We have improved in confidence to undertake tasks and make decisions without the need to refer constantly back to the committee, whilst remaining accountable. The list of things that went well was far longer and contained far more important items than the list of improvements. Some of the feedback from the delegates:

'Great organising, keep up the good work! Nice accommodation and perfect food.'

'Good planning of the breaks and food times'

How Many Students were involved

The conference was organised and run entirely by the 8 PhD students named above, and we had to negotiate support and assistance from staff members as it was required. There was no member of staff with responsibility for the conference. Another 13 PhD students were recruited to run the tracks, sub-divisions of the conference containing subject-specific talks. There were 93 students presenting their research at the conference.

What we learned

We further developed our team working skills and negotiated for funding and services. We collaborated with colleagues from other universities in taking over the conference and writing a joint proposal for funding. We are now supporting the new committee organising the next conference in Bristol. We enhanced our budgeting skills, logistic skills, form-filling and logistics. We learned to trust each other including when others used a different approach to gain the desired result. We coped with inefficiency, obstruction and changed deadlines from outside organisations and individuals on whom we were obliged to rely. We planned so well that there were only minor issues that needed dealing with during the conference itself, and these were invisible to the vast majority of delegates.

Contribution to our Research

Organising conferences and other meetings is an essential part of a researcher's skill set. Our collaborations have continued to build our networks both within our research areas and within the broader mathematical community. During the academic programme, we had the opportunity to attend and give talks, and so benefit from the peer discussions and questions which are the *raison d'être* of the meeting. The hard work and rigorous planning ahead of time also allowed us to network with those in our field of interest and meet potential collaborators of the future, building our personal networks for our future research, and possibly, employment.