Undergraduates Speak Out

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Outline

Undergraduate Conference 2010

- Why we organised it?
- How we organised it?
- Professional body input
- How it went?
- Feedback
- Discussion relating to transfer to other disciplines.
Introduction

- Keen students
- IMA’s Early Career Mathematicians Conference
- Wanted something more relevant to HE maths syllabus
- Encourage research
- Detail accessible current research
- Promote professional body membership
- Encourage networking
- Keynote speaker
Other undergrad conferences

- Many similar maths conferences in USA
- British Conference of Undergraduate Research (BCUR) http://www.bcur.org/
Benefit to the Professional body

- Institute of Mathematics and its Applications
  - The chartered UK professional body and international learned society for qualified and practising mathematicians
  - A registered charity, to support the advancement of mathematical knowledge and its applications and to promote and enhance mathematical culture

- University Liaison Officer
  - To promote & raise awareness of the IMA to university students and engage university students with mathematics & mathematics community
  - Touring the country visiting universities, giving talks
  - Funding for university student maths societies
Initial plans

- Approached IMA early in 2009
- They agreed to underwrite costs
- Agreement of Ian Stewart to speak
- Created logo
- Put out a call for abstracts
- Emailed list of HoDs of HE maths depts
- Over 30 abstracts came in
  - Exeter to Aberdeen
  - Including Oxford, Cambridge, Greenwich, St. Andrews, Warwick etc
Plan of day

- Accepted all talks
- Some plenary, some splinter sessions
- Tried to simulate an academic conference
- 100 undergraduates from 22 universities attended this and 30 of them gave talks
# Plan of day

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10:00</td>
<td><strong>Coffee and Registration</strong></td>
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<tr>
<td>10:15</td>
<td>Introduction</td>
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<tr>
<td>10:30</td>
<td>3 Plenary talks</td>
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<tr>
<td>11:30</td>
<td><strong>Break</strong></td>
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<tr>
<td>11:50</td>
<td>2 pure maths talks</td>
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<tr>
<td>12:30</td>
<td><strong>Plenary talk</strong></td>
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<tr>
<td>12:50</td>
<td><strong>Lunch</strong></td>
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<td>14:00</td>
<td>Afternoon split into 5 parallel sessions with 3 talks before the break and 2 afterwards</td>
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<tr>
<td>15:00</td>
<td><strong>Break</strong></td>
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<tr>
<td>16:00</td>
<td>Keynote talk - Professor Ian Stewart, University of Warwick, <em>Mathematical Curiosities and Treasures from Professor Stewart's Cabinet</em></td>
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Feedback from students

- I really enjoyed today – a really good chance to talk to people that like to talk about maths. Undergraduate, Glasgow, 2010
- Thanks again for putting that conference together, it was an amazing experience and I will always cherish it. Final year undergraduate, St Andrews, 2011
- TMT was really great, you got to show people what you enjoy most in maths and see what others enjoyed. Second year undergraduate, Greenwich, 2011
Feedback from students

- I would like to thank you for giving me a chance to become a part of such an event. It was a fantastic life experience to me. I learned a lot and also met great people who are genuinely interested in Mathematics. Also thank you for all your encouragement, I do really appreciate it! Final year undergraduate, Royal Holloway, 2010
Feedback from staff

- Thank you for hosting such a successful event for our students. I have received very positive feedback and we are pleased as a department that so many of our students took an active interest.
  
  Bill White, QMUL, 2010

- Those who have reported back to us certainly seem to have enjoyed the occasion and we shall encourage our students to take part in future events of this sort.
  
  Alan Naughton, St Andrews, 2010

- Thanks again for organising the conference - everyone I spoke to got a great deal out of it and are eager for something similar to happen again.
  
  Barrie Cooper, Exeter, 2010
Feedback from Graduates

- Speaking at TMT was undoubtedly the highlight of my mathematical career thus far. My TMT research when coupled with my third-year studies has enabled me to come up with an excellent dissertation idea. My confidence and skills in public speaking were enhanced incredibly and has been a prime experience to use when applying for graduate jobs. Employers are especially impressed at the amount of motivation and passion required to voluntarily research a topic and present your findings to such a large audience. I was also able to gain excellent feedback from students at other universities, allowing me to look at my research in new ways.

Graduate, Greenwich, 2011
Feedback from the IMA

- Excellent feedback from IMA Council and University Liaison steering group
  - “Very well run”
  - “Students involved - those presenting and those attending - got a lot of benefit from the experience”
  - “A fantastic and worthwhile achievement”
- Good exposure for the IMA
- Students attended from universities I had not visited as University Liaison Officer
Feedback from Organisers

- A lot of work!
- Increased students’ confidence
- Enabled us to network other universities
- Increased involvement in IMA
- Raised profile of maths dept in the University
- Excellent for our students as well as those from other HEIs
- Well worth it!
References

Discussion

- What are the professional bodies in your area?
- Could you collaborate with a professional body / other HEIs?
- Does anyone in your area run anything like this?
- Does your subject lend itself to undergrad research?
- Could you organise one for your discipline at Greenwich?