## **Reports of Sponsored Meetings**

## IRISH MATHEMATICS LEARNING SUPPORT NETWORK 8TH ANNUAL WORKSHOP 28 JANUARY 2014, IT TALLAGHT DUBLIN

The Irish Mathematics Learning Support Network (IMLSN) was founded in 2009. Its aim is to act as an informal focus point for all those who are interested in the provision of mathematics and statistics support at higher education institutions in Ireland. This gathering, the 8th Annual Workshop of the IMSLN, had a theme of *Diversity: challenges and opportunities - enabling and supporting* mathematics learning in a diverse student population.

This workshop was motivated by the increasingly diverse population of students studying mathematics as part of their higher education. This diversity manifests itself in many ways but in particular:

- A higher proportion of students entering higher education are not coming straight from second level.
- The number of students with particular learning needs is increasing.

The workshop was co-hosted by the Institute of Technology Tallaght Dublin (ITTD) and the Dublin Institute of Technology (DIT), and was held in ITTD.

The day began with a Welcoming Address by the President of ITTD, Pat McLaughlin. This was then followed by the first of the keynote addresses, given by Clare Trott, a Mathematics Support Tutor at Loughborough University. Clare gave a fascinating and very informative presentation on supporting neurodiverse students with their mathematics and statistics studies. She outlined many of the different forms of neurodiversity that tutors in a Maths Learning Centre (MLC) may encounter and illustrated, with the aid of case studies, some strategies on how tutors may enable neurodiverse students to overcome educational barriers.

Following this were two further short presentations. Brien Nolan of Dublin City University (DCU) gave a very engaging outline of a group work tutorial that was run for a large service teaching module (work done in collaboration with Eabhnat Ní Fhloinn). Anthony Cronin of University College Dublin (UCD) discussed an interesting study he undertook involving the use of a novel software package, Realizeit, to provide Maths Support for adult learners.

The workshop resumed in the afternoon with an address by the second Keynote Speaker- Terry Maguire, who is the Chair of Adults Learning Mathematics - An International Research Forum and the Director of the National Forum for the Enhancement of Teaching and Learning in Higher Education. Terry gave a very interesting presentation on the topic of Adult Learners and Mathematics Support. She discussed some of the characteristics of adult learners and the implications for support offered to these students by MLCs. Finally the speaker introduced the Forum for the Enhancement of Teaching and Learning in Higher Education and outlined areas of possible collaboration between the Forum and the IMLSN community.

The final session in the conference consisted of two further short presentations. Ciarán O'Sullivan of ITTD gave an illuminating overview of some of the results from a large scale survey of Mathematics Learning Support in Irish higher education institutions that relate to adult learners (work done in collaboration with Olivia Fitzmaurice , Eabhnat Ní Fhloinn and Ciarán Mac an Bhaird ). Timothy J. Crawford from Queens University Belfast (QUB) spoke on the MLS offered to mature students in QUB, which is primarily delivered through an appointment based model as well as online support that is tailored to specific student groups (work done in collaboration with Jonathan S. Cole). This informative presentation led to an open discussion on some of the issues surrounding MLS for mature students/adult learners at the various institutes represented at the workshop.

The day concluded with a discussion session, chaired by Ciarán Mac an Bhaird of NUI Maynooth (NUIM), where the possibility of sharing support materials between MLCs via Dropbox, among other topics, was discussed.

A total of 27 people from 18 different institutions (UCD, NUI Galway, DCU, Cork IT, IT Sligo, Sheffield Hallam University, Newcastle University, IT Carlow, Dun Laoghaire Institute of Art, Design and Technology, ITTD, QUB, NUIM, University of Limerick, Dundalk IT, Loughborough University, DIT, National Forum for the Enhancement of Teaching and Learning in Higher Education, Athlone IT) were in attendance. This workshop was funded by the Registrar's Office in ITTD, the School of Mathematical Sciences in DIT and the Irish Mathematical Society.

A full list of abstracts and slides from each presentation can be found here:

http://supportcentre.maths.nuim.ie/mathsnetwork/workshop8

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## GROUPS IN GALWAY 2014 23–24 MAY 2014, NUIG

Groups in Galway, an annual conference on group theory and related topics which has been running since 1978, was held at NUI Galway on 23–24 May. The conference had 35 participants and featured seven talks of speakers from Ireland, UK, continental Europe and USA. The following wide range of topics were covered: homology of linear groups, algebraic K-theory, hyperbolic manifolds, block algebras and fusion systems, algebras of essential relations, and Moonshine. The speakers and titles were:

- Philippe Elbaz-Vincent (Université de Grenoble): The group  $K_8(\mathbb{Z})$  is trivial
- Herbert Gangl (Durham University): On the homology of linear groups over imaginary quadratic fields
- Michael Tuite (NUI Galway):
  - A brief history of Moonshine.
- Markus Linckelmann (City University London): A characterisation of nilpotent blocks
- Radha Kessar (City University London): On transitive block fusion systems
- Kevin Hutchinson (UCD):

Hilbert's third problem and scissors congruence groups

- Grant Lakeland (University of Illinois at Urbana-Champaign): Systoles and Dehn surgery for hyperbolic 3-manifolds
- Jacques Thévenaz (EPF Lausanne): From finite sets to group algebras