# PROGRAMME 17th ANNUAL MEETING (BMC2004)

# Department of Pure Mathematics, Queen's University Belfast 5–8 April 2004

The 17th Annual Meeting of the IMS was held, for the first time, as a joint meeting with the British Mathematical Colloquium and thus goes under the name *BMC2004* this time. The Organising Committee consisted of Dr M Mathieu (Chair), Prof D Armitage (Secretary), and Dr L Halbeisen (Treasurer). The meeting was financially supported by the London Mathematical Society, the Edinburgh Mathematical Society, and the IMS as well as by Belfast City Council and Queen's University Belfast

All talks were held in the Peter Froggatt Centre. The meetings on the Tuesday evening were held in Stranmillis College, and the Publishers' Reception took place in the Old McMordie Hall in the School of Music.

#### Monday 5th

13:00	Registration starts
15:00-16:00	Coffee and Tea
16:15-16:45	Opening Ceremony
17:00-18:00	Plenary Lecture Efim Zelmanov (UCSD) On large pro-p groups
18:30-20:00	Publishers' Reception
20:00	Dinner

## Tuesday 6th

	Parallel Sessions
9:30–10:15	Stephen Buckley (NUI Maynooth) Gromov hyperbolicity for analysts Robert Marsh (Leicester) Cluster algebras and tilting theory
10:30–11:15	Keith Carne (Cambridge) How an analytic function changes the length of a radius Goetz Pfeiffer (NUI Galway)
	Subgroups and cosets in finite Coxeter groups
11:15-11:45	Coffee and Tea
11:45–12:45	Plenary Lecture Gilles Pisier (TAMU & Univ Paris VI) Factorization of completely bounded maps on exact C*-algebras and operator spaces
12:45 - 14:15	Lunch
14:15-16:15	<b>Special Session</b> Non-commutative Functional Analysis
14:15-14:55	Mikael Rørdam (Odense) Purely infinite C*-algebras
14:55-15:35	Matthias Neufang (Ottawa) Quantization in abstract harmonic analysis
15:35-16:15	Marius Junge (Urbana) Embedding of the operator space OH and related results
14:15-16:15	Splinter Groups*
16:15-17:00	Coffee and Tea
17:00-18:00	Plenary Lecture Claudio Procesi (Roma La Sapienza) The role of the Cayley-Hamilton identity in representation theory

Tuesday 6th (ctd.)

18:30-19:30	Dinner at Stranmillis College
19:30-20:10	BMC Annual General Meeting
20:15-20:30	International Review of UK Mathematics
20:30-21:30	Presentation by Isaac Newton Institute
20:15-22:30	BMC Scientific Committee

### Wednesday 7th

### **Parallel Sessions**

- 9:30–10:15 Tom Carroll (NUI Cork) Harmonic measure in parabola-shaped regions in  $\mathbb{R}^n$ Sergei Merkulov (Stockholm) Infinity constructions of local geometries
- 10:30–11:15 Sean Dineen (NUI Dublin) Banach-valued spectra Sandra Pott (York) Admissibility of observation operators and vector BMO functions
- 11:15-11:45 Coffee and Tea
- 11:45–12:45Plenary LectureGünter Ziegler (TU Berlin)On the combinatorics of the 3-sphere
- 12:45-14:15 Lunch
- 14:15–16:15 **Special Session** *Combinatorics*
- 14:15–14:55 **Graham Brightwell (LSE)** The number of linear extensions of a partially ordered set
- 14:55–15:35 Oliver Riordan (Cambridge) Scale-free random graphs

### Wednesday 7th (ctd.)

Special Session (ctd.)

- 15:35–16:15 Alex Scott (UCL) Independent sets, lattice gases and the Lovasz Local Lemma
- 14:15–16:15 Splinter Groups\*
- 16:15-17:00 Coffee and Tea
- 17:00–18:00 Plenary Lecture Samuel Patterson (Univ Göttingen) Squaring circles and circling squares— Gauss' Circle Problem
- 19:00–20:00 Reception in Belfast City Hall
- 20:00–22:30 Conference Dinner in Belfast City Hall

#### Thursday 8th

#### **Parallel Sessions**

- 9:30–10:15 Alastair Wood (DCU) The influence of G.G. Stokes on the modern asymptotic theory of differential equations Graham Ellis (NUI Galway) Polytopes and the cohomology of groups
- 10:30–11:15 Mary Rees (Liverpool) Dynamics and automatic structure of groups Stephen Huggett (Plymouth) Tutte polynomials of links, graphs, and matroids
- $11{:}15{-}12{:}00$   $\,$  Coffee and Tea  $\,$
- 12:00–13:00 Plenary Lecture Alexander Kechris (CalTech at Pasadena) Fraissé limits, Ramsey theory, and topological dynamics of automorphism groups
- 13:00 Departure

## \*Splinter Groups

Altogether 56 talks of 25min length were given in the following Splinter Groups:

Algebraic Geometry Algebraic Topology Differential Equations Differential Geometry Discrete Mathematics Functional Analysis General Topology Group Theory History of Mathematics Lie Groups and Representation Theory Logic and Set Theory Mathematical Physics Number Theory Real Analysis Ring Theory

On Monday 5th, a *Student Conference* was held at which 10 postgraduate students reported quite successfully on their research. In parallel, a meeting of the *North British Functional Analysis Seminar* was held in the David Bates building, at which Prof. Erling Størmer (Oslo) gave two 1-hour lectures.

The Committee and the General Meeting of the IMS were both held on Tuesday 6th.