

**LMS Durham Symposium**  
**"Geometry and Cohomology in Group Theory"**  
Tuesday 12th July - Friday 22nd July 1994

**Programme**

**Tuesday, 12th July**

*Arrival day and registration.*

**Wednesday, 13th July**

**Morning**

09.00 - 09.50	M. Bridson	<i>"Quasi-isometry invariants of finitely generated groups"</i>
10.00 - 10.50	A. Ol'shanskii	<i>"Hyperbolic groups and their inductive limits I"</i>
11.00 - 11.30	<b>Coffee</b>	
11.30 - 12.20	G. Baumslag	<i>"Homology of finitely presented groups I"</i>

**Afternoon**

15.30 - 16.20	A. Adem	<i>"Characters, K-theory and cohomology of discrete groups"</i>
16.30 - 17.05	W. Neumann	<i>"Classifying automatic structures"</i>
17.15 - 17.50	D.B.A. Epstein	<i>"Bounded cohomology of hyperbolic groups"</i>
18.00 - 18.30	P.M. Neumann	<i>"Frobenius groups : A cohomological challenge"</i>
18.40 -	<i>Sherry Reception to welcome participants</i>	

**Thursday, 14th July**

**Morning**

09.00 - 9.50	J. Carlson	<i>"Cohomology, representations and quotient categories of modules I"</i>
10.00 - 10.50	P.A. Linnell	<i>"Analytic versions of the zero divisor conjecture "</i>
11.00 - 11.30	<b>Coffee</b>	
11.30 - 12.20	J.S. Wilson	<i>"Finitely presented soluble groups I"</i>

### Afternoon

15.30 - 16.20	H. Bass	<i>T.B.A.</i>
16.30 - 17.05	G. Mislin	<i>"On the cohomology of the mapping class group"</i>
17.15 - 17.50	K. Vogtmann	<i>"Free factorizations of finitely generated free groups"</i>
	D.J. Benson	<i>"Cohomology of sporadic groups, finite loop spaces and the Dickson invariants"</i>
18.00 - 18.30	J. Greenlees	<i>"The local cohomology theorem for group cohomology"</i>

### Friday, 15th July

#### Morning

09.00 - 9.50	R.I. Grigorchuk	<i>"Automata and group theory"</i>
10.00 - 10.50	A. Ol'shanskii	<i>"Hyperbolic groups and their inductive limits II"</i>
11.00 - 11.30	<b>Coffee</b>	
11.30 - 12.20	M. Bridson	<i>"Isoperimetric inequalities for finitely presented groups"</i>

#### Afternoon

15.30 - 16.20	M.W. Davis	<i>"Artin groups and hyperbolic complements"</i>
16.30 - 17.05	C. Champetier	<i>"The space of finitely generated groups"</i>
17.15 - 17.50	P. Papasoglu	<i>"On the asymptotic cone of groups satisfying a quadratic isoperimetric inequality"</i>
18.00 - 18.30	F.E.A. Johnson	<i>"Cohomological invariants of discrete isometry groups"</i>

### Saturday, 16th July

*Coach trip to Holy Island*

### Sunday 17th July

#### Morning

09.00 - 9.50	G. Baumslag	<i>"Homology of finitely presented groups II"</i>
10.00 - 10.50	M. Bridson	<i>"Combinations of groups"</i>
11.00 - 11.30	<b>Coffee</b>	
11.30 - 12.20	R.I. Grigorchuk	<i>"Some famous problems of topology from a group theoretical point of view"</i>

## Sunday 17th July

### Afternoon Section 1

15.30 - 16.20	R. Geoghegan	<i>"Higher Euler characteristics of groups"</i>
16.30 - 17.05	E. Ventura	T.B.A.
17.15 - 17.50	I. Leary	<i>"On the exponent of group cohomology"</i>
18.00 - 18.30	J. Harlander	<i>"The virtual cohomological dimension of graph products of groups"</i>

### Afternoon Section 2

15.30 - 16.20	Yu.V. Kuz'min	<i>"On Kulikov C-groups"</i>
16.30 - 17.05	H-W. Henn	<i>"Centralizers of elementary abelian p-groups, the Borel construction of the singular locus and applications to the cohomology of discrete groups"</i>
17.15 - 17.50	J. Cornick	T.B.A.
18.00 - 18.30	R.A. Fenn	T.B.A.

## Monday, 18th July

### Morning

0.900 - 09.50	J.S. Wilson	<i>"Finitely presented soluble groups"</i>
10.00 - 10.50	J. Carlson	<i>"Cohomology, representations and quotient categories of modules II"</i>
11.00 - 11.30	<b>Coffee</b>	
11.30 - 12.20	P.A. Linnell	<i>"Analytic versions of the zero divisor conjecture II"</i>

### Afternoon

15.30 - 16.20	M. Dunwoody	<i>"Folding sequences for inaccessible groups"</i>
16.30 - 17.05	J.R.J. Groves	<i>"Geometric invariants for abelian-by-nilpotent groups"</i>
17.15 - 17.50	G. Noskov	<i>"Triangle buildings and Cayley complexes"</i>
18.00 - 18.30	G. Niblo	<i>"A bi-automatic structure for groups acting on non-positively curved cube complexes"</i>

## Tuesday, 19th July

### Morning

09.00 - 9.50	A. Ol'shanskii	<i>"Hyperbolic groups and their inductive limits III"</i>
10.00 - 10.50	J.S. Wilson	<i>"Finitely presented soluble groups III"</i>
11.00 - 11.30	<b>Coffee</b>	
11.30 - 12.20	G. Baumslag	<i>"Homology of finitely presented groups III"</i>

### Afternoon

*Cathedral Visit*

## Tuesday, 19th July

### Evening

*Conference Dinner*

19.00 - 19.30 *Sherry*

19.30 - *Dinner*

## Wednesday, 20th July

### Morning

09.00 - 09.50 R.I. Grigorchuk *"An independent system of relations and the Schur multiplier of a certain finitely generated infinite torsion group"*

10.00 - 10.50 J. Carlson *"Cohomology, representations and quotient categories of modules III"*

11.00 - 11.30 **Coffee**

11.30 - 12.20 P.A. Linnell *"Analytic versions of the zero divisor conjecture III"*

### Afternoon

15.30 - 16.20 J. Alonso *"Quasi-isometry invariance and cohomological finiteness conditions"*

16.30 - 17.05 D. Benson *"Cohomology of Sporadic groups, finite loop spaces and the Dickson invariants"*

17.15 - 17.50 H. Meinert *"The higher geometric invariants of soluble groups of finite Prüfer rank"*

18.00 - 18.30 R. Thomas *"Finitely presented semigroups"*

## Thursday, 21st July

### Morning

09.00 - 09.50 J. Carlson *"Cohomology, representations and quotient categories of modules IV"*

10.00 - 10.50 M. Bridson *"Groups acting on spaces of non-positive curvature"*

11.00 - 11.30 **Coffee**

11.30 - 12.20 R.I. Grigorchuk *"A survey of constructions and properties of groups of intermediate growth"*

### Afternoon

15.30 - 16.20 M. Bestvina *"The dynamics of automorphisms of  $F_n$ "*

16.30 - 17.05 S.J. Pride *"Second order Dehn functions"*

17.15 - 17.50 C.F. Miller *"Isoperimetric functions of one-relator groups"*

18.00 - 18.30 M. du Sautoy *"Zeta functions of groups : Functional equations"*

## Friday, 22nd July

*Departure day*