LONDON MATHEMATICAL SOCIETY - SERC DURHAM SYMPOSIUM

NONCOMMUTATIVE RINGS - NEW DIRECTIONS
14th - 24th July 1992

Wednesday 15th July ROOM CG93

9.15 - 10.15 a.m. **S.P.SMITH** - Graded Algebras I

10.20 - 10.50 a.m. Coffee

11.00 a.m. - 12 noon **K.R.GOODEARL** - q-skew polynomials and quantum matrices

4.15 - 4.45 p.m. Tea

5.00 - 6.00 p.m. **M. AUSLANDER** - k-Gorenstein algebras

6.30 p.m. *RECEPTION IN GREY COLLEGE -JUNIOR COMMON ROOM*

Thursday 16th July ROOM CG93

9.15 - 10.15 a.m. **S.P. SMITH** - Graded Algebras II

10.20 - 10.50 a.m. Coffee

11.00 a.m. - 12 noon **J.A. GREEN** - The Schur Algebra

2.00 p.m. *PHOTOGRAPH*

2.15 - 4.15 p.m. **Organizer: G.R. KRAUSE** - "Noetherian Rings/PI Rings"

4.15 - 4.45 p.m. Tea

5.00 - 6.00 p.m. **A. JOSEPH** - Structure theorems for quantized enveloping algebras and their Hopf duals I

Friday 17th July ROOM CG93

9.15 - 10.15 a.m. **E.S. LETZTER** - Noetherian ring extensions and representation theory

10.20 - 10.50 a.m. Coffee

11.00 a.m. - 12 noon **S. DONKIN** - Schur Algebras

2.15 - 4.15 p.m. **Organizer: J.C. McCONNELL** - Quantum Groups/Enveloping Algebras

4.15 - 4.45 p.m. Tea

5.00 - 6.00 p.m. **A. JOSEPH** - Structure theorems for quantized enveloping algebras II

Saturday 18th July ROOM CG93

9.00 - 10.00 a.m. **I. MUSSON** - Enveloping Algebras of Lie Superalgebras

10.00 - 10.30 a.m. Coffee

10.30 - 11.30 a.m. **T. LEVASSEUR** - Primitive ideals of $C_q[SL(n)]$ I

11.40 a.m. - 12.40 p.m. **S.P.SMITH** - Graded Algebras III

Sunday 19th July *ALL DAY OUTING TO ROBIN HOOD'S BAY AND WHITBY*

Monday 20th July	**ROOM CG93**
9.15 - 10.15 a.m.	**D. PASSMAN** - The semisimplicity problem for group rings
10.20 - 10.50 a.m.	Coffee
11.00 a.m. - 12 noon	**L. LeBRUYN** - Arithmetic of Sklyanin algebras
2.15 - 4.15 p.m.	**Organizer: M. Lorenz** - "Generalisations of group rings/Group actions"
4.15 - 4.45 p.m.	Tea
5.00 - 6.00 p.m.	**T. LEVASSEUR** - Primitive ideals of $C_q[SL(n)]$ II
7.00 p.m. for 7.30 p.m.	*CONFERENCE DINNER*
Tuesday 21st July	**ROOM CG93**
9.15 - 10.15 a.m.	**M.P. HOLLAND** - Differential operators and the geometry of curves
10-20 - 10.50 a.m.	Coffee
11.00a.m. - 12 noon	**S.C. COUTINHO** - Irreducible modules over the Weyl algebras
12.15 - 12.40 p.m.	**K.C. O'MEARA** - "A new measure of growth for finitely generated algebras" **ROOM CM105**
2.15 - 4.15 p.m.	*GUIDED TOUR OF DURHAM CATHEDRAL*
4.15 - 4.45 p.m.	Tea
5.00 - 6.00 p.m.	**J.T. STAFFORD** - On the structure of graded rings with finite global dimensions I
Wednesday 22nd July	**ROOM CG93**
9.15 - 10.15 a.m.	**M. ARTIN** - Noncommutative projective geometry
10.20 - 10.50 a.m.	Coffee
11.00 a.m. - 12 noon	**K.R. GOODEARL** - The algebraic side of operator algebra
2.15 - 3.25 p.m.	**Organizer: M.P. HOLLAND** - "Differential operators/ regular algebras
3.30 - 4.00 p.m.	Tea
4.45 - 6.00 p.m.	**Organizer: M.P. HOLLAND** - "Differential operators/ regular algebras (continued)
Thursday 23rd July	**ROOM CG93**
9.15 - 10.15 a.m.	**I.REITEN** - Tilting
10.20 - 10.50 a.m.	Coffee
11.00 a.m. - 12 noon	**M. LORENZ** - Grothendieck groups of invariant rings
12.15 - 12.45 p.m.	**J. ALEV** - Finite group actions and Chevalley's theorem in enveloping algebras **ROOM CM107**
4.15 - 4.45 p.m.	Tea
5.00 - 6.00 p.m.	**J.T. STAFFORD** - On the structure of graded... II

GENERALISATIONS OF GROUP RINGS/GROUP ACTIONS

Monday 20th July, 2.15 p.m. - 4.15 p.m.

CG93

2.15 - 2.40 p.m.	MARIA ANGELONE	-	Jones index and fixed rings
2.45 - 3.10 p.m.	YI ZHONG	-	Homological dimension of skew group rings and crossed products
3.15 - 3.40 p.m.	CHRIS BROOKES	-	Filtrations and finite presentability
3.45 - 4.10 p.m.	BRIAN HARTLEY	-	Ideals in group rings of simple locally finite groups

TUESDAY 21st JULY 1992   Room CM105

12.15 - 12.40 p.m.

K.C. O'MEARA - *"A new measure of growth for finitely generated algebras"*

ABSTRACT: A new dimension function on countable-dimensional algebras (over a field) will be described.   Its dimension values for finitely generated algebras exactly fill the unit interval [0, 1].   Since the free algebra on two generators turns out to have dimension 0 (although conceivably some Noertherian algebras might have positive dimension!), this dimension function promises to distinguish among algebras of infinite GK-dimension.

(This is joint work with J. HANNAH.)

Noetherian Rings/PI Rings

Thursday 16th July, 2.15 p.m. - 4.25 p.m.

CG93

2.15 - 2.45 p.m.	A. BELL	-	Algebras of finite dimensional representation type
2.50 - 3.25 p.m.	A. BRAUN	-	On the localization problem of a prime ideal in a noetherian PI ring
3.30 - 4.00 p.m.	S. JØNDRUP	-	Automorphisms of some PI rings
4.05 - 4.25 p.m.	R. RESCO	-	Presentation of affine noetherian algebras

Enveloping Algebras/Quantum Groups

Friday 17th July, 2.15 p.m. - 4.15 p.m.

CG93

2.15 - 2.40 p.m.	S. MONTGOMERY	-	Schur's double centralizer theorem for colour Lie algebras
2.45 - 3.10 p.m.	S. MAJID	-	Algebras and Groups in Braided Categories
3.15 - 3.40 p.m.	T. SUDBERY	-	Deformations of coordinate rings of "matrices" and their Hilbert series
3.45 - 4.10 p.m.	J. ALEV	-	Fields of fractions of certain quantum algebras

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11.40 a.m. - 12.40 p.m.   **S.P.SMITH** - Graded Algebras   III

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