DURHAM SYMPOSIUM ON COMMUTATIVE ALGEBRA

15-25 July, 1981

Provisional Academic Programme

Thursday 16 July	,	
9.30-10.30	D. G. Northcott:	Finite free resolutions and some basic concepts of commutative algebra
11.00-12.00	A. Lascoux:	Syzygies of determinantal ideals
2.15- 4.15	Short talks:	details to be arranged
5.30- 6.30	E. G. Evans:	The syzygy problem
Friday 17 July		
9.30-10.30	J. D. Sally:	Reductions, local cohomology and Hilbert functions of local rings
11.00-12.00	D. Rees:	Multiplicities, Hilbert functions and degree functions
2.15- 4.15	Short talks:	details to be arranged
5.30- 6.30	J. Herzog:	Local rings whose associated graded rings are C.M.
Saturday 18 July	<u>.</u>	
9.15-10.15	S. Gotô:	Local cohomology modules and rings with linear resolution
10.45-11.45	W. Bruns:	Generic maps and modules
Sunday 19 July		
Monday 20 July		
9.30-10.30	M. Hochster:	The status of the homological conjectures, I
11.00-12.00	L. Szpiro:	Title not yet available
2.15- 4.15	Short talks:	details to be arranged
5.30-6.30	R. Y. Sharp:	Modules of generalized fractions and balanced big Cohen-Macaulay modules
Tuesday 21 July		
9.30-10.30	M. Hochster:	The status of the homological conjectures, II
11.00-12.00	HB. Foxby:	Homological dimension theory for complexes of modules
2.15- 4.15	Short talks:	details to be arranged
5.30- 6.30	D. A. Buchsbaum:	Schur functors and applications, I
Wednesday 22 July		
9.30-10.30	M. Hochster:	The status of the homological conjectures, III
11.00-12.00	HB. Foxby:	Complexes of injective modules
5.30- 6.30	D. A. Buchsbaum:	Schur functors and applications, II

Thursday 23 July

9.30-10.30 The representation of the symmetric group on A. Lascoux: the cohomology ring of flag manifolds (according to De Concini-Procesi, Springer,...) 11.00-12.00 G. Horrocks: Title not yet available 2.15- 4.15 Short talks: details to be arranged 5.30- 6.30 D. A. Buchsbaum: Schur functors and applications, III Friday 24 July 9.30-10.30 To be arranged 11.00-12.00 M. Hochster: Applications of algebraic geometry to combinatorics (after R. P. Stanley) 2.15-4.15 Short talks: details to be arranged 5.30- 6.30 Short talks: details to be arranged

Notes

- 1. The present intention is that there should be no formal academic programme at times other than those specified above.
- 2. The main lectures will all take place in room M1 on the ground floor.
- 3. Three smaller rooms (M117, M119, M121 on the first floor) have been booked for the Symposium. Any participant who wishes will be able to arrange further informal seminars, discussions, etc. Rooms should be booked through Rodney Sharp, so that clashes can perhaps be avoided and meetings can be publicised.
- 4. Morning coffee after the first lecture on each of the eight working mornings will be in the High Wood Room (and participants are requested to wear their Symposium badges so that they won't be charged!). Please note that the morning programme for Saturday is 15 minutes earlier than usual (in order to fit in with social activities planned for later that day).
- 5. It is hoped to produce a list of open problems relevant to the topics discussed at the Symposium: any contributions to this would be welcome, and should be sent/given to Rodney Sharp.