

**Interaction of Finite Dimensional Algebras
with other areas of Mathematics**
BIRS, September 25–30, 2004

SCHEDULE

Sunday, September 26, 2004

7:00– 8:30 *B r e a k f a s t* (2nd floor lounge, Corbet Hall)

Chair of the morning session: V. DLAB

8:30– 8:35 *Introduction and welcome to BIRS* (Max Bell 159)

8:35– 9:25 V. GINZBURG: Report on the work of Arkhipov–Bezrukavnikov–Ginzburg
(ABG I.)

9:35–10:25 A. MALKIN: Preprojective algebra I. A construction

10:35–11:00 *C o f f e e* (2nd floor lounge, Corbet Hall)

11:00–11:50 O. SCHIFFMANN: Canonical bases for loop algebras

12:00–13:30 *L u n c h* (Donald Cameron Hall)

Chair of the afternoon session: L. SCOTT

14:00–14:50 S. ARIKI: Some problems of Hecke algebras

15:00–15:50 A. KLESHCHEV: Representations of finite W -algebras

16:00–16:30 *C o f f e e* (2nd floor lounge, Corbet Hall)

16:30–17:20 B. LECLERC: Verma modules and preprojective algebras

17:30–19:30 *D i n n e r* (Donald Cameron Hall)

Monday, September 27, 2004

7:00– 8:30 *B r e a k f a s t* (2nd floor lounge, Corbet Hall)

Chair of the morning session: C. RINGEL

8:30– 9:20 A. MALKIN: Preprojective algebra II: H^0

9:30–10:20 V. GINZBURG: ABG II.

10:30–11:00 *C o f f e e* (2nd floor lounge, Corbet Hall)

11:00–11:50 K. ERDMANN: Modular Lie powers and the Solomon descent algebra

12:00–13:30 *L u n c h* (Donald Cameron Hall)

13:30–14:30 *Guided tour of the BANFF CENTRE*

Chair of the afternoon session: Z. LIN

14:40–15:30 R. ROUQUIER: $sl(2)$ actions on abelian categories

15:30–16:00 *C o f f e e* (2nd floor lounge, Corbet Hall)

16:00–16:50 W. TURNER: ROCK blocks

17:00–17:30 R. KESSAR: Quantized symmetric algebras and blocks with one simple module

17:40–18:10 S. KÖNIG: Comparing generalized Schur algebras

18:10–19:30 *D i n n e r* (Donald Cameron Hall)

Tuesday, September 28, 2004

7:00– 8:30 *B r e a k f a s t* (2nd floor lounge, Corbet Hall)

Chair of the morning session: S. KUMAR

8:30– 9:20 R. ROUQUIER: Characterization of q -Schur algebras

9:30–10:20 M. LINCKELMANN: The orbit space of a fusion system is contractible

10:30–11:00 *C o f f e e* (2nd floor lounge, Corbet Hall)

11:00–11:30 P. WEBB: The coinvariant algebra for reflection groups in positive characteristic

11:40–12:10 L. AVRAMOV: Gaps in the Hochschild cohomology of a commutative algebra imply smoothness

12:10–12:15 *G R O U P P H O T O*

12:15–13:30 *L u n c h* (Donald Cameron Hall)

F R E E A F T E R N O O N

17:30–19:30 *D i n n e r* (Donald Cameron Hall)

Wednesday, September 29, 2004

7:00– 8:30 *B r e a k f a s t* (2nd floor lounge, Corbet Hall)

Chair of the morning session: J. XIAO

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| 8:30– 9:20 | S. KUMAR: | Towards proof of Cachazo–Douglas–Seiberg–Witten conjecture
for simple Lie algebras |
| 9:30–10:20 | W. WANG: | A super duality and Kazhdan–Lusztig polynomials |
| 10:30–10:50 | <i>Coffee</i> | (2nd floor lounge, Corbet Hall) |
| 10:50–11:40 | T. TANISAKI: | Kazhdan–Lusztig basis and a geometric filtration
of an affine Hecke algebra |
| 11:45–13:30 | <i>Lunch</i> | (Donald Cameron Hall) |
| 12:00–13:00 | <i>Concert:</i> | “Music at noon” (Robson Recital Hall) |
| Chair of the afternoon session: L. AVRAMOV | | |
| 13:30–14:20 | D. NAKANO: | Representation type of the blocks of the category \mathcal{O}_S |
| 14:30–15:00 | A. MATHAS: | Idempotents in Ariki–Koike algebras |
| 15:05–15:35 | S. LIU: | Some homological conjectures for a further generalization of
quasi-hereditary algebras |
| 15:40–16:00 | <i>Coffee</i> | (2nd floor lounge, Corbet Hall) |
| 16:00–16:50 | B. PARSHALL: | Decomposition numbers, category equivalence and cohomology |
| 17:00–17:50 | J. DU: | Representations of algebras with Frobenius morphisms |
| 17:50–19:00 | <i>Dinner</i> | (Donald Cameron Hall) |
| Chair of the evening session: R. KESSAR | | |
| 19:00–19:50 | V. GINZBURG: | ABG III. |
| 20:00–20:30 | J. XIAO: | Representations of tame quivers and affine canonical bases |

Thursday, September 30, 2004

7:00– 8:30 *B r e a k f a s t* (2nd floor lounge, Corbet Hall)

Chair of the morning session: R. ROUQUIER

8:30– 9:20 J. SCHRÖER: Exceptional modules over preprojective algebras

9:30–10:00 O. IYAMA: Higher dimensional Auslander–Reiten theory on
maximal orthogonal subcategories

10:00–10:20 *C o f f e e* (2nd floor lounge, Corbet Hall)

10:20–10:50 C. STROPPEL: From Kazhdan–Lusztig theory to knot invariants
via categorification

11:00–11:50 S. BERMAN: Lie algebras defined by matrices via generators and relations

11:50–13:30 *L u n c h* (Donald Cameron Hall)

C h e c k o u t from the rooms by 12:00