

Final report on the AARMS conferences on
Statistics in the Health Sciences
and
Algebra and Combinatorics

held in conjunction with the annual APICS undergraduate conference, University of New Brunswick,
Fredericton, Friday October 12 to Sunday October 14, 2007.

Statistics in the Health Sciences

Saturday October 13, 11:00 am, Christopher Field Lecture in Statistics:
Emery N. Brown, Harvard and MIT, *Studying How the Brain Forms Memories*.
Attendance: in excess of 100.

Sunday October 14, 8:00 am – 1:00 pm.

Attendance: 16.

David Hamilton, Dalhousie University, *A quantal analysis of long term synaptic plasticity in the brain: statistical aspects*.

Emery N. Brown, Harvard and MIT, *Signal Processing Algorithms to Decipher Brain Function*.

Philip Parker, IBME at UNBF, *Signal-to-noise Ratio in Myoelectric Signal Processing*.

Christopher Field, Dalhousie, *Variable Selection in Longitudinal Models*.

J Concepción Loredó-Osti, Memorial, *The use of Steiner trees to approximate the linkage likelihood in large pedigrees*.

Laurent Briollais, Samuel Lunenfeld Research Inst. Toronto, *Methodological Issues in Penetrance Estimation Studies*

Bruce Smith, Dalhousie, *Point Processes, Binary Time Series, and Applications*.

Algebra and Combinatorics

Saturday October 13, 2:00 pm, Blundon Lecture in Mathematics:

Martin Lorenz, Temple University, Philadelphia, *How large can a finite group of matrices be?*

Attendance: in excess of 100.

Sunday October 14, 8:00 am – 1:00 pm.

Attendance: 20.

Martin Lorenz, Temple University, Philadelphia, *Koszul algebras and the master theorem*.

Andrew Hoefel, Dalhousie University, *Betti numbers of chordal edge ideals*.

Eddy Campbell, Memorial University, *On the 2-Dimensional Vector Invariants of the Cyclic Group of order p in characteristic p* .

Robert Dawson, Saint Mary's University, *Some New 2D Cellular Automata*.

Edgar Goodaire, Memorial University, *Loops with Jordan loop rings and the construction of certain Latin squares*.

Wendy Finbow-Singh, Saint Mary's University, *Isostatic Almost-Spherical Framework via Disc Decomposition*.

Al Kaszzyk, University of New Brunswick, *One scoop or two? The Hilbert Series of certain threefolds*.

The organizers received many favourable comments about the combined APICS/AARMS conference. The keynote lectures (Saturday, large audiences) were well received. All presentations at the specialized sessions on Sunday (smaller audiences) were excellent. Tariqul Hasan (Stats session organizer) and Colin Ingalls (Algebra and Combinatorics session organizer) join me in thanking AARMS for its generous support. A budget is attached.

Sincerely,

Maureen Tingley
December 6, 2007

AARMS budget APICS 2007

INCOME

Grant from AARMS: \$ 4,400.00

EXPENSES: \$ 4,400.00

Registrations for APICS:

9 faculty 900

4 student 180

2 ret faculty 140

Total Reg: \$ 1,220.00

Airfare:

Emery Brown \$ 474.53

Martin Lorenz \$ 749.01

Hotel:

Brown: \$ 294.12

Lorenz: \$ 294.12

Grad student travel/Accom

Travel Liwen Zou: 457.79

Travel A. Hoefel: 297.76

Total travel & accomm: \$ 2,567.33

Grant to NB Math Competition: \$ 612.67