Free Probability Theory
October 9 - 14, 2004

MEALS

Breakfast (Continental): 7:00 – 9:00 am, 2nd floor lounge, Corbett Hall, Sunday – Thursday
*Lunch (Buffet): 11:30 am – 1:30 pm, Donald Cameron Hall, Sunday – Thursday
*Dinner (Buffet): 5:30 – 7:30 pm, Donald Cameron Hall, Saturday – Wednesday
Coffee Breaks: As per daily schedule, 2nd floor lounge, Corbett Hall
*Please remember to scan your meal card at the host/hostess station in the dining room for each lunch and dinner.

MEETING ROOMS

All lectures will be held in Max Bell 159 (Max Bell Building accessible by bridge on 2nd floor of Corbett Hall). Hours: 6 am – 12 midnight. LCD projector, overhead projectors and blackboards are available for presentations. *Please note that the meeting space designated for BIRS is the lower level of Max Bell, Rooms 155-159. Please respect that all other space has been contracted to other Banff Centre guests, including any Food and Beverage in those areas.*

SCHEDULE

Saturday, October 9

16:00   Check-in begins (Front Desk – Professional Development Centre - open 24 hours)
17:30-19:30 Buffet Dinner, Donald Cameron Hall
20:00   Informal gathering in 2nd floor lounge, Corbett Hall
               Beverages and small assortment of snacks available on a cash honour-system basis.

Sunday, October 10

7:00-8:45   Breakfast.
8:45-9:00   Welcome from the PIMS staff.
9:10-10:00   D. Shlyakhtenko: Estimates for free entropy dimension.
10:00-10:30 Coffee break
10:30-11:20 A. Guionnet: About optimal transport for non-commutative variables.
11:30-13:00 Lunch
13:00-14:00 Tour of the Banff Centre, meet in the 2nd floor lounge, Corbett Hall
14:00-14:50 F. Radulescu: A non-commutative, analytic version of Hilbert's 17-th problem in type
               II_1 von Neumann algebras.
15:00-15:30 M. Anshelevich: Orthogonal polynomials with a resolvent-type generating function.
15:30-16:00 Coffee break
16:00-16:50 J. Mingo: Fluctuations of Random Unitary Matrices and Second Order Freeness.
17:00-17:30 M. Neagu: Asymptotic Freeness of Random Permutation Matrices from Gaussian
               Matrices.
17:30-19:30 Dinner

Monday, October 11

9:10-10:00   H. Schultz: Invariant subspaces for operators in a general II_1 factor
10:00-10:30 Coffee Break
10:30-11:20 U. Haagerup: Invariant subspaces for operators in a general II_1 factor (continued)
11:30-12:00 H. Bercovici: Hincin's theorem for multiplicative free convolution
12:00-12:10 Group Photo in front of Corbett Hall
12:10-13:30 Lunch
13:30-14:20 E. Ricard: Factoriality of the q-Gaussian algebras
14:30-15:00 K. Dykema: Nearest neighbor random walks on amalgamated free product groups
15:00-15:30 Coffee Break
15:30-16:00 D. Petz: Transportation cost in free probability
16:10-16:50 F. Hiai: Free pressure and free entropy
17:00-17:40 R. Bauer: Conformal invariance, SLE, and connections with free probability
17:40-19:30 Dinner
19:30-20:20 A. Hora: Topics in the random permutation model for free probability

Tuesday, October 12

9:00- 9:50   P. Sniady: Free probability and representations of symmetric groups
10:00-10:30 I. Goulden: A direct bijection for the Harer-Zagier formula
10:30-11:00 Coffee Break
11:00-11:50 M. Capitaine: Cumulants for random matrices
12:00-13:30 Lunch

FREE AFTERNOON

17:30-19:30 Dinner
19:30-20:20 G. Ben Arous: Free extreme values

Wednesday, October 13

9:10-10:00   A. Soshnikov: Poisson statistics for largest eigenvalues of Wigner and Wishart random
             matrices with heavy tails
10:00-10:30 Coffee Break
10:30-11:10 B. Collins: Free probability and Jacobi ensembles
11:20-12:00 F. Lehner: A free version of de Finetti's Theorem
12:00-13:30 Lunch
13:30-14:10 S. Thorbjornsen: A random matrix approach to the lack of projections in C^*_red(F_2)
14:20-15:00 M. Pimsner: Graded groups in KK-theory
15:00-15:30 Coffee Break
15:30-16:10 K. Jung: Free entropy dimension and subfactors
16:20-17:00 C. Koestler: On the structure of non-commutative Bernoulli shifts
17:10-17:40 S. Belinschi: Regularity for free convolution
17:40-19:30 Dinner

Thursday, October 14

8:50-9:40   M. Bozejko: Conditional freeness and some classes of free Levy processes
9:50-10:30   E. Effros: Combinatorics and free probability
10:30-11:00 Coffee Break
11:00-12:00 Informal Discussions
12:00   END OF THE WORKSHOP