

CRM 50th anniversary program  
New Developments in Free Probability and Applications  
March 1-31, 2019

**Activities for week 2 (March 11-15)**

Centre de recherches mathématiques  
Montréal, Canada

**TUESDAY March 12**

09:30 - 12:30 *“Regularity and the Free Field”*  
Tobias Mai, Roland Speicher, and Sheng Yin

14:30 - 16:00 *“Introduction to outliers”*  
Hari Bercovici

**THURSDAY March 14**

09:30 - 12:30 *“Introduction to Traffic Freeness”*  
Benson Au, Guillaume Cébron, and Camille Male

14:30 - 15:30 *“Group-theoretical quantum groups”*  
Laura Maassen

16:00 - 17:00 *“Quantum automorphism groups of finite graphs”*  
Simon Schmidt

**FRIDAY March 15**

09:30 - 10:30 *“Fluctuation moments induced by some asymptotically liberating unitary matrices”*  
Josué Vázquez Becerra

11:00 - 12:00 *“A random matrix approach to the Peterson-Thom conjecture”*  
Ben Hayes

The Peterson-Thom conjecture is a conjecture in von Neumann algebras about the structure of approximately finite-dimensional subalgebras of free group factors, and many recent papers have come out of an attempt to understand and solve this problem. Related to my work on strongly 1-bounded algebras, I will state a random matrix conjecture about strong convergence which I can show would imply the Peterson-Thom conjecture.