

Quantitative Linear Algebra

Tuesday March 27, 2018

11:00–12:00 **Srivatsav Kunnawalkam Elayavalli** (University of California, Berkeley (UC Berkeley))
QLA2018 Seminar Series: Free entropy through matrix microstates

Thursday March 29, 2018

11:00–2:00 **Roy Araiza** (Purdue University)
QLA2018 Group Problem Session

Tuesday April 3, 2018

11:00–12:00 **David Renfrew** (Binghamton University (SUNY))
Eigenvalues of random non-Hermitian matrices and randomly coupled differential equations

Wednesday April 4, 2018

1:00–2:00 **Roy Araiza** (Purdue University)
QLA2018 General Seminar Series

Thursday April 5, 2018

11:00–2:00 **Roy Araiza** (Purdue University)
QLA2018 Group Problem Session

Tuesday April 17, 2018

11:00–12:00 **Joel Tropp** (California Institute of Technology)
Universality laws in geometric random matrix theory



Wednesday April 18, 2018

10:00–11:00 **Roy Araiza** (Purdue University)
QLA2018 General Seminar Series

Thursday April 19, 2018

10:30–12:00 **Roy Araiza** (Purdue University)
QLA2018 Group Problem Session

Monday April 23, 2018

3:00–4:00 **Gilles Pisier** (Texas A&M University - College Station)
Part 1 - Grothendieck's works on Banach spaces and their surprising recent repercussions

Tuesday April 24, 2018

11:00–12:00 **David Jekel** (University of California, Los Angeles (UCLA))
An Elementary Approach to Free Entropy for Log-Concave Random Matrix Models

3:00–4:00 **Gilles Pisier** (Texas A&M University - College Station)
Part 2 - Grothendieck's works on Banach spaces and their surprising recent repercussions

Wednesday April 25, 2018

2:00–3:00 **Roy Araiza** (Purdue University)
QLA2018 General Seminar Series (Characterizations of Operator Systems via Tensor Product Nuclearity)

Thursday April 26, 2018

10:30–12:00 **Roy Araiza** (Purdue University)
QLA2018 Group Problem Session ()*

Friday April 27, 2018

- 11:00–12:00 **Roy Araiza** (Purdue University)
QLA2018 General Seminar Series (Characterizations of Operator Systems via Tensor Product Nuclearity Part II)

Monday May 7, 2018

- 2:00–3:00 **Trond Digernes** (Norwegian University of Science and Technology (NTNU))
Finite approximations of physical systems over local fields

Tuesday May 8, 2018

- 1:00–2:00 **Ben Hayes** (University of Virginia)
QLA2018 General Seminar Series: 1-Bounded Entropy with Applications to von Neumann Algebras.

Wednesday May 9, 2018

- 10:00–11:00 **Ben Hayes** (University of Virginia)
QLA2018 General Seminar Series: A Random Matrix Approach to the Peterson-Thom Problem
- 1:00–2:00 **Archit Kulkarni** (University of California, Berkeley (UC Berkeley))
Convergence of Hermite Roots to the Semicircle Law

Thursday May 10, 2018

- 10:30–12:00 **Roy Araiza** (Purdue University)
QLA2018 Group Problem Session
- 1:00–2:00 **Laura Cladek** (University of California, Los Angeles (UCLA))
QLA2018 General Seminar Series: Quantitative Additive Energy Estimates for Regular Sets and Connections to Discretized Sum-Product Theorems

Tuesday May 22, 2018

- 10:00–11:00 **Miguel Walsh** (University of Buenos Aires)
The polynomial method and incidence geometry
- 11:20–12:20 **Palina Salanevich** (University of California, Los Angeles (UCLA))
Time-frequency structured random matrices, their properties, and applications

Wednesday May 23, 2018

2:00–3:00 **Nikhil Srivastava** (University of California, Berkeley (UC Berkeley))
The Finite R-Transform

Tuesday May 29, 2018

11:00–12:00 **Konstantin Tikhomirov** (Princeton University)
The smallest singular value of very sparse random matrices with non-zero diagonal

Wednesday May 30, 2018

10:00–11:00 **Han Huang** (University of Michigan)
QLA 2018 General Seminar Series: The size of Nodal Domain for a Erdős–Rényi Graph

Thursday May 31, 2018

1:00–2:00 **David Jekel** (University of California, Los Angeles (UCLA))
Operator-valued Non-Commutative Probability and Analytic Functions, Part 1

Friday June 1, 2018

1:00–2:00 **David Jekel** (University of California, Los Angeles (UCLA))
Operator-valued Non-Commutative Probability and Analytic Functions, Part 2

Tuesday June 5, 2018

11:00–12:00 **Fan Yang** (University of California, Los Angeles (UCLA))
Generalized resolvent estimates for random band matrices

Wednesday June 6, 2018

10:00–11:00 **Brent Nelson** (University of California, Berkeley (UC Berkeley))
Non-tracial graph algebras, I: free Araki–Woods factors

Thursday June 7, 2018

- 11:00–12:00 **Brent Nelson** (University of California, Berkeley (UC Berkeley))
Non-tracial graph algebras, II: type III factors associated to weighted graphs
- 2:00–3:00 **Marc Potters** (University of California, Los Angeles (UCLA))
Applications of free probability to data analysis: Cleaning financial covariance matrices

Friday June 8, 2018

- 1:00–2:00 **Archit Kulkarni** (University of California, Berkeley (UC Berkeley))
Convergence of roots of expected characteristic polynomials of unitary ensembles to the equilibrium measure