

Quantitative Linear Algebra Reunion Conference II at Lake Arrowhead

Sunday December 12, 2021

1:30 *Bus Departs UCLA/Faculty Center*
4:30 *Check in at Lake Arrowhead*
6:30–8:00 *Dinner*
8:00–9:00 *Joint Session (Iris): Programs Overview by Marco Cavaglia (GWA2021), Pablo Suarez-Serrato (GL2019), Dima Shlyakhtenko (QLA2018), and Frank Jenko (BDC2018),*
9:00–10:00 *Social Hour (Iris)*

Monday December 13, 2021

8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*
9:00–9:40 **Dan-Virgil Voiculescu** (University of California, Berkeley (UC Berkeley))
Miscellaneous about Commutants mod
10:00–10:40 **Ben Hayes** (University of Virginia)
Property (T) and strong 1-boundedness for von Neumann algebras
11:00–11:25 **Theo McKenzie** (University of California, Berkeley (UC Berkeley))
Many nodal domains in random regular graphs
12:00–1:00 *Lunch (on your own)*
1:30–2:10 **Olga Holtz** (University of California, Berkeley (UC Berkeley))
Title: The quantitative (if not always) linear algebra of zonotopes
2:35–3:25 **Srivatsav Kunnawalkam Elayavalli** (Vanderbilt University)
A mystery about groups
3:50–4:15 **Dima Shlyakhtenko** (Institute for Pure and Applied Mathematics)
Estimates on free entropy dimension.
6:30–8:00 *Dinner*
8:00–8:40 *Joint Session (Iris): "How linear algebra proved expansion of graphs and is on the way to rule the world" by Igor Pak (UCLA)*
9:00–10:00 *Social Hour (Iris)*



Tuesday December 14, 2021

8:00–9:00	<i>Check-In/Breakfast (Hosted by IPAM)</i>
9:00–9:40	Igor Pak (University of California, Los Angeles (UCLA)) <i>Log-concave poset inequalities</i>
10:00–10:40	Shravas Rao (Northwestern University) <i>Degree vs. Approximate Degree and Quantum Implications of Huang's Sensitivity Theorem</i>
11:00–11:25	Benjamin Mirabelli (Princeton University) <i>Non-Hermitian and Multivariate Finite Free Probability</i>
12:00–1:00	<i>Lunch (on your own)</i>
1:00–6:30	<i>Afternoon Free</i>
6:30–8:00	<i>Dinner</i>
8:00–8:40	<i>Joint Session (Iris): "Unweaving the fabric of the universe" by Mairi Sakellariadou (King's College London)</i>
9:00–10:00	<i>Social Hour (Iris)</i>

Wednesday December 15, 2021

8:00–9:00	<i>Check-In/Breakfast (Hosted by IPAM)</i>
9:00–9:40	Rolando de Santiago (Purdue University) <i>S-malleable deformations and maximal rigid subalgebras.</i>
10:00–10:40	David Jekel (University of California, San Diego (UCSD)) <i>Optimal couplings in free probability</i>
11:00–11:25	Brent Nelson (Michigan State University) <i>Quantum Edge Correspondences</i>
12:00–1:00	<i>Lunch (on your own)</i>
1:00–6:30	<i>Afternoon Free</i>
6:30–8:00	<i>Dinner</i>
8:00–8:40	<i>Joint Session (Iris): "Geometry of Data in Generative and Discriminative Learning" by Guido Montufar (UCLA)</i>
9:00–10:00	<i>Social Hour (Iris)</i>

Thursday December 16, 2021

8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*

9:00–9:40 **Vishesh Jain** (Stanford University)
Singularity of discrete random matrices

10:00–10:40 **Therese Landry** (University of California, Riverside (UC Riverside))
Developments in Noncommutative Fractal Geometry

11:00–11:25 **Nick Boshert** (University of California, Los Angeles (UCLA))
Free moment measures (joint work with J. Bahr)

12:00–1:00 *Lunch (on your own)*

1:00–6:30 *Afternoon Free*

6:30–8:00 *Dinner*

8:00–8:40 *Joint Session (Iris): "Facets of Computational" by Hans-Joachim Bungartz (TU Munich)*

9:00–10:00 *Social Hour (Iris)*

Friday December 17, 2021

8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*

9:00–9:40 **Jorge Garza Vargas** (University of California, Berkeley (UC Berkeley))
Rapid convergence of the shifted QR algorithm on nonnormal matrices

11:00–12:00 *Checkout*

12:00–1:00 *Lunch (on your own)*

1:00 *Bus Departs Lake Arrowhead (LAX/Marriott/UCLA)*

IPAM strives to provide an inclusive environment free of harassment. IPAM does not tolerate sexual harassment, other forms of harassment, or sexual assault. Please familiarize yourself with our community agreement which includes instructions on reporting incidents by using the QR code to the right.

