

**RMT, Time Series and Many-Body Systems**  
**June 26-30, 2017**  
**CIC A.C., Cuernavaca, Mexico**

**PROGRAM**

Monday, June 26

**09:30 Registration**

10:00 *Opening and welcome*

10:10 Francois Leyvraz (ICF-UNAM, México), *The strange fact of spectra with different symmetries being uncorrelated*

**11:10 Coffee break**

11:50 Pablo Barberis (IIMAS, UNAM, México), *Some thoughts about the Quantum Van Trees inequality*

12:50 Moisés Carrera (ICF-UNAM, México), *Quantum Non-Markovianity in a Random Matrix Model*

**13:30 Lunch break**

15:00 Santosh Kumar (Shiv Nadar University, India), *Recursion for the smallest eigenvalue density in  $\beta$ -Wishart-Laguerre Ensembles*

**16:00 Coffee break**

16:20 David Davalos (IF-UNAM, México), *Divisibility of quantum dynamical maps vs. divisibility of quantum channels*

17:00 Héctor Moreno (ICF-UNAM, México), *Decoherence in a tripartite system*

Tuesday, June 27

10:00 Jacobus Verbaarschot (Stony Brook University, USA), *Spectral and Thermodynamical Properties of the SYK Model*

11:00 Roman Riser (Holon Institute Of Technology, Israel), *Conformal Symmetry of a 2D Coulomb gas*

11:40 **Coffee break**

12:00 Takuya Kanazawa (RIKEN, Japan), *RMT and the supersymmetric SYK model*

13:00 Mauricio Saavedra (Universidad De Guadalajara, México), *Time series analysis of EEG records using clustering of correlation matrices*

13:40 **Lunch break**

15:00 Mario Kieburg (Bielefeld University, Germany), *Symmetry Classification for Gauge Theories on Cubic Lattices*

16:00 **Coffee break**

16:20 José Morales (ICF-UNAM, México), *Randomness of a financial time series*

17:00 Esteban Martínez (UNAM, México), *Quantum estimation of unknown parameters: Theoretical insights and calculations*

Wednesday, June 28

08:00 **Excursion**

17:30 **ICF-Colloquium:** Eugene Kanzieper (Holon Institute Of Technology, Israel), *Random Matrix Spectra: Level Spacing Distribution vs Power Spectrum*

Thursday, June 29

10:00 Eugene Kanziiper (Holon Institute Of Technology, Israel), *Power Spectrum in Quantum Chaotic Systems with Broken Time-Reversal Symmetry: Exact Solution*

11:00 Kiran Sharma (Jawaharlal Nehru University, India), *A mesoscopic mapping between financial fluctuations and economic fundamentals*

**11:40 Coffee break**

12:00 Rubén Fossión (ICN-UNAM, México), *Homeostasis from a time-series perspective: An intuitive interpretation of the variability of physiological variables*

13:00 Harinder Pal (ICF-UNAM, México), *Dynamics of semantic networks*

**13:40 Lunch break**

15:30 Anirban Chakraborty (Jawaharlal Nehru University, India), *Complex network analysis of co-movements of stock indices*

**16:30 Coffee break**

16:50 Thomas Gorin (Universidad De Guadalajara, México), *Random matrix environments and non-Markovianity*

17:50 Manan Vyas (ICF-UNAM, México), *Spin dynamics of interacting quantum systems after a random quench*

18:50 Adam Mielke (Bielefeld University, Germany), *Universal Distribution of Would-be Topological Zero Modes in Coupled Chiral Systems*

**19:30 Party at the cave**

Friday, June 30

10:00 Soham Biswas (Universidad De Guadalajara, México), *Rich structure in the correlation matrix spectra in non-equilibrium steady states*

11:00 Arlex Marin (ICF-UNAM, México), *RMT, Graph Theory and Multi-modal Brain Signal Analysis: Preliminary Results from the Human Connectome Project*

**11:40 Coffee break**

12:00 Thomas Seligman (ICF-UNAM, México), *Random density matrices versus random evolution of open system*

**14:00 Conclusion**