

Solvay Workshop on “SYK models: from strongly correlated systems to quantum gravity”

Brussels, June 27 - 28, 2023 - ULB - Campus Plaine - **FORUM F**

TUESDAY 27 JUNE

- 09:15 - 09:30 Registration (in front of FORUM F)
- 09:30 - 09:45 Welcome address (Marc Henneaux & Subir Sachdev)
- 09:45 - 10:25 Jean-Philippe Brantut - *All-to-all interacting quantum gases*
- 10:25 - 11:05 Sebastian Diehl - *Phases and phase transitions in non-unitary quantum dynamics*
- 11:05 - 11:30 COFFEE BREAK (in the hall adjacent to Forum F)**
- 11:30 - 12:10 Jorge Kurchan - *A few surprising analogies between models of Black Holes and glasses*
- 12:10 - 12:50 Koenraad Schalm - *T-linear resistivity, optical conductivity and Planckian transport for a holographic local quantum critical metal in a periodic potential*
- 12:50 - 14:10 LUNCH BREAK (in the hall adjacent to Forum F)**
- 14:10 - 14:50 Mathias Scheurer - *Correlated many-body physics in van der Waals moiré superlattices*
- 14:50 - 15:30 Andreas Läuchli - *Thermalization Dynamics in Quantum Spin Chains*
- 15:30 - 16:00 COFFEE BREAK (in the hall adjacent to Forum F)**
- 16:00 - 16:40 Leticia Cugliandolo - *Slow dynamics: aging, weak long-term memory & time reparametrization invariance*
- 16:40 - 17:20 Andy Lucas - *Disordered quantum critical fixed points from holography*
- 19 :30 BANQUET (Les Petits Oignons, 25 rue de la Régence, 1000 Bruxelles)**

WEDNESDAY 28 JUNE

- 09:30 - 10:10 Felix Haehl - *Effective description of sub-maximal chaos and stringy effects from SYK models*
- 10:10 - 10:50 Mike Blake - *The Page curve from the entanglement membrane*
- 10:50 - 11:20 COFFEE BREAK (in the hall adjacent to Forum F)**
- 11:20 - 12:00 Blaise Goutéraux - *Towards effective actions for critical holographic matter*
- 12 :00 - 12:40 Sean Hartnoll - *Emergent area laws from entangled matrices*
- 12:40 - 12:50 Group Photo**
- 12 :50 - 14:10 LUNCH BREAK (in the hall adjacent to Forum F)**
- 14:10 - 14:50 Dario Benedetti - *Tensor models: from quantum gravity to SYK and beyond*
- 14:50 - 15:30 Giuseppe Di Giulio - *Symmetry-resolved modular correlation functions in free fermionic theories*
- 15:30 - 16:00 COFFEE BREAK (in the hall adjacent to Forum F)**
- 16:00 - 16:40 Thomas Mertens - *Double-scaled SYK, quantum groups, and JT gravity*