

**3rd French Russian Conference on Random Geometry and
Physics: The Sachdev-Ye-Kitaev Model and Related Topics
Steklov Mathematical Institute, Moscow, 3-7 June 2019**

	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
10:00-10:30	Volovich	Rivasseau	Aref'eva	Verbaarschot	Morozov
10.30-11.00	Sonner	Toriumi	Tezuka	Gorsky	Spiridonov
11:10-11:40	Aron	Vasiliev	Berkooz	Krajewski	Stukopin
11:40-12:10	Suzuki	Carrozza	Khramtsov	Evnin	Katanaev
12.10-12:40	Coffee	Coffee	Coffee	Coffee	Closing
12:40-13:10	Dymarsky	Duplantier	Belavin	Zarembo	
13:10-13:40	Nechaev	Belokurov	Jafferis	A. Orlov	
13:40-14:10	Metsaev	Vignes-Tourneret	Lunch	Sakbaev	
14:10-15:30	Lunch	Lunch	Free	Lunch	
15:30-15:50	Ageev	Sazonov	Free	Golubtsova	
15:50-16.10	Inozemcev	Harribey	Free	Patrushev	
16:10- 16:30	Pavlenko	Delporte	Free	Zenkevich	
16:30-17:00	Coffee	Coffee	Free	Coffee	
17:00-17:40	Klebanov (video talk)	Eichhorn (video talk)	Free	Mayburov (17.00- 17.20)	
17.40-18.10	Tarnopolsky (video talk)	Discussion	Free	Discussion	
18:10-21:30	Wellcome party		Conference Dinner		

Program of 3rd French-Russian Conference on Random Geometry and Physics: Sachdev-Ye-Kitaev Model and Related Topics

Monday, June 3rd

- 9.30 — 9.50 Registration of participants
- 9.50 — 10.00 Irina Aref`eva (Steklov Mathematical Institute of Russian Academy of Sciences);
Vincent Rivasseau (professor, University Paris-Sud XI, Orsay)
Opening
- 10.00 — 10.30 Igor Volovich (Steklov Mathematical Institute of Russian Academy of Sciences);
Random matrices, SYK and moduli of Riemann surfaces
- 10.30 — 11.00 Julian Sonner (University of Geneva)
A many-body perspective on black-hole micro states
- 11.00 — 11.10 Short break
- 11.10 — 11.40 Camille Aron (Ecole Normale Supérieure, Laboratoire de Physique Théorique, Paris)
(Non) equilibrium dynamics: a (broken) symmetry
- 11.40 — 12.10 Kenta Suzuki (CPhT, Ecole Polytechnique, Paris)
Emergence of Space-Time in the SYK Model
- 12.10 — 12.40 Coffee break
- 12.40 — 13.10 Sergei Nechaev (Poncelet Laboratory)
Phyllotaxis and Lifshitz tails in 1D Anderson localization: what is common?
- 13.10 — 13.40 Anatoly Dymarsky (University of Kentucky & Skoltech)
Quantum KdV hierarchy in 2d CFTs
- 13.40 — 14.10 Ruslan Metsaev (Lebedev Physical Institute of Russian Academy of Sciences)
Continuous-spin field in AdS space and conformal algebra representations
- 14.10 — 15.30 Lunch
- 15.30 — 15.50 Dmitry Ageev (Steklov Mathematical Institute of Russian Academy of Sciences)
Momentum/operator size holographic correspondence and applications

15.50 — 16.10 Oleg Inozemcev (Steklov Mathematical Institute of Russian Academy of Sciences)
Operative Formulation of the Eigenstate Thermalization Hypothesis

16.10 — 16.30 Kirill Pavlenko (Skoltech)
Generalized Eigenstate Thermalization in 2d CFTs

16.30 — 17.00 Coffee break

17.00 — 17.40 Video talk:
Igor Klebanov (Princeton University)
Dynamics of Tensor and SYK Models

17.40 — 18.10 Video talk:
Grigory Tarnopolsky (Harvard University)
Remarks on the Complex SYK model

Tuesday, June 4th

10.00 — 10.30 Vincent Rivasseau (University Paris-Sud XI, Orsay)
Random tensors, a flexible tool for geometry and physics

10.30 — 11.00 Reiko Toriumi (Okinawa Institute of Science and Technology)
Perturbative Tensor Field Theories

11.00 — 11.10 Short break

11.10 — 11.40 Mikhail Vasiliev (Lebedev Physical Institute of Russian Academy of Sciences)
Present status of higher-spin theory

11.40 — 12.10 Sylvain Carrozza (Perimeter Institute for Theoretical Physics)
SYK-like tensor quantum mechanics with $Sp(N)$ symmetry

12.10 — 12.40 Coffee break

12.40 — 13.10 Bertrand Duplantier (Institut de Physique Théorique de Saclay)
Random Planar Maps and Paths and Liouville Quantum Gravity

13.10 — 13.40 Vladimir Belokurov (Moscow State University)
Functional integrals In Schwarzian theory

13.40 — 14.10 Fabien Vignes-Tourneret (Université de Lyon)
Constructive Tensor Field Theory through an example

- 14.10 — 15.30 Lunch
- 15.30 — 15.50 Vasily Sazonov (University of Graz)
Large- N dynamics of the spiked tensor model with random initial conditions
- 15.50 — 16.10 Sabine Harribey (CPhT, Ecole Polytechnique, Paris)
Line of fixed points in a bosonic tensor model
- 16.10 — 16.30 Nicolas Delporte (University Paris-Sud XI, Orsay)
Perturbative QFT on a Random Tree
- 16.30 — 17.00 Coffee break
- 17.00 — 17.40 Video talk:
Astrid Eichhorn (CP3-Origins, University of Southern Denmark)
Tensor models for quantum gravity from a functional Renormalization Group perspective

Wednesday, June 5th

- 10.00 — 10.30 Irina Aref`eva (Steklov Mathematical Institute of Russian Academy of Sciences);
Gas of baby universes in JT gravity and matrix models
- 10.30 — 11.00 Masaki Tezuka (Kyoto University)
Characterization of chaotic dynamics in quantum systems
- 11.00 — 11.10 Short break
- 11.10 — 11.40 Micha Berkooz (Weizmann Institute of Science)
Towards a full solution of the large N double scaled SYK model
- 11.40 — 12.10 Mikhail Khramtsov (Steklov Mathematical Institute of Russian Academy of Sciences);
Probing nonperturbative structures in gravity with SYK
- 12.10 — 12.40 Coffee break
- 12.40 — 13.10 Alexander Belavin (Landau Institute of Theoretical Physics)
JKLMR conjecture and Batyrevs polytopes
- 13.10 — 13.40 Daniel Jafferis (Harvard University)
Entanglement entropy in 2d gravity

13.40 — 14.30 Lunch
14.30 — 18.30 Excursion
18.30 — 21.00 Conference dinner

Thursday, June 6th

10.00 — 10.30 Jacobus Verbaarschot (Stony Brook University)
Quantum Chaos in a Coupled Sachdev-Ye-Kitaev Model

10.30 — 11.00 Alexander Gorsky (IITP RAS & MIPT)
Resummation of instantons near poles and AdS3 geometry

11.00 — 11.10 Short break

11.10 — 11.40 Thomas Krajewski (Aix-Marseille Université)
Non Gaussian average in the Sachdev-Ye Kitaev model

11.40 — 12.10 Oleg Evnin (Chulalongkorn University, Bangkok & Solvay Institute, Brussels)
Quantum resonant systems

12.10 — 12.40 Coffee break

12.40 — 13.10 Konstantin Zarembo (NORDITA Institute, Stockholm)
 $N=2^$ super-Yang-Mills theory: from holography to random matrices*

13.10 — 13.40 Aleksandr Orlov (NRU Higher School of Economics)
Matrix models for Hurwitz numbers for Klein surfaces

13.40 — 14.10 Vsevolod Sakbaev (Moscow Institute of Physics and Technology)
Limit distributions of compositions of independent random semigroups of linear operators

14.10 — 15.30 Lunch

15.30 — 15.50 Anastasia Golubtsova (BLTP, Joint Institute for Nuclear Research)
On integrable holographic RG flows with one and several running couplings

15.50 — 16.10 Alexander Patrushev (Bauman Moscow State Technical University)
Entanglement entropy in strongly correlated systems with phase

transition and anisotropy

- 16.10 — 16.30 Yegor Zenkevich (Milano Bicocca University & ITEP)
3d gauge theories, matrix models and superalgebras
- 16.30 — 17.00 Coffee break
- 17.00 — 17.20 Sergey Mayburov (Lebedev Physical Institute of Russian Academy of Sciences)
Nuclear decay oscillations and bilocal quantum gravity

Friday, June 7th

- 10.00 — 10.30 Andrey Morozov (IITP RAS & ITEP)
From Topological to Quantum Entanglement
- 10.30 — 11.00 Vyacheslav Spiridonov (BLTP, Joint Institute for Nuclear Research)
4d Superconformal indices and 2d statistical mechanics
- 11.00 — 11.10 Short break
- 11.10 — 11.40 Vladimir Stukopin (Don State Technical University & MIPT)
On representations of Yangians and Quantum Loop Superalgebras
- 11.40 — 12.10 Mikhail Katanaev (Steklov Mathematical Institute of Russian Academy of Sciences)
Chern-Simons action in the geometric theory of defects
- 12.10 — 12.40 Closing