

# Schedule

**Friday, July 8th**

**8:30 – 9:20 Registration** at the Euler Institute

**9:20 Opening**

**Morning session. Chair: Dmitri Diakonov**

**9:30**

**Ilya Gruzberg** (Chicago). Mott-Berezinsky formula, instantons, and integrability

**10:30**

**Christof Gattringer** (Graz). New approaches to QCD at finite matter density

**11:30 Coffee break**

**12:00**

**Igor Gornyi** (Karlsruhe & Ioffe). Interaction-induced criticality in topological insulators

**13:00 Lunch**

**Afternoon session. Chair: Alexander Mirlin**

**15:00**

**Alexei Yung** (PNPI). Confined magnetic monopoles in dense QCD

**16:00 Coffee break**

**16:30**

**Boris Pavlov** (Auckland & St. Petersburg). Landau – Zener phenomenon in 2d periodic sandwich

**18:00 Welcome party** at Euler Institute

## **Saturday, July 9th**

### **Morning Session. Chair: Ilya Gruzberg**

**9:30**

**Pavel Ostrovsky** (Karlsruhe & Landau). Localization in disordered systems with chiral symmetry

**10:30**

**Michael Hermele** (Boulder). Majorana spin liquids and projective spin rotation symmetry

**11:30 Coffee break**

**12:00**

**Ludwig Faddeev** (Steklov @ St. Petersburg). Quantum dilogarithm

**13:00 Lunch**

### **Afternoon session. Chair: Christof Gattlinger**

**15:00**

**Felix von Oppen** (FU Berlin). Majorana fermions and topological phases in disordered quantum wires

**16:00 Coffee break**

**16:30**

**Vladimir Matveev** (U. of Bourgogne), Multiple rogue waves solutions to the Gross – Pitaevskii equation

**17:10**

**Igor Bogolubsky** (Dubna). On localized structures in 2d and 3d models comprising Yang-Mills fields

## **Sunday, July 10th**

### **Morning session. Chair: Yan Fyodorov**

**9:30**

**Alexander Its** (Purdue U.). Quantum entanglement and the finite gap integration

**10:30**

**Akira Furusaki** (RIKEN). Competing phases of XXZ spin chain with frustration

**11:30 Coffee break**

**12:00**

**Lev Lipatov** (PNPI). Effective action for the Regge processes in gravity

**13:00 Lunch**

Group meetings

**18:00 Boat trip and conference dinner on board.**

## **Monday, July 11th**

### **Morning session. Chair:**

**9:30**

**Matthew Fisher** (UCSB & Microsoft). Non-Fermi liquid phases for itinerant electrons

**10:30**

**Gil Refael** (Caltech), Floquet topological insulators

**11:30 Coffee break**

**12:00**

**Samson Shatashvili** (Trinity College, Dublin & IHES, Bures-Sur-Yvette). Integrability in Quantum Theory, and Applications

**13:00 Lunch**

### **Afternoon session. Chair:**

**15:00**

**Igor Burmistrov** (Landau). Spin and charge correlations in quantum dots: The effect of level statistics

**16:00 Coffee break**

**16:30**

**Anatoly Kotikov** (Dubna). The property of maximal transcendentality in the N=4 Supersymmetric Yang – Mills

**17:10**

**Alexey Vladimirov** (Bochum). Infrared Logarithms in Effective Field Theories

## **Tuesday, July 12th**

### **Morning session. Chair:**

**9:30**

**Dmitri Ivanov** (EPFL). Phase transitions in full counting statistics in time-periodic setups

**10:30**

**Yan Fyodorov** (Nottingham). Fluctuation properties of  $1/f$  noise: from Statistical Mechanics to Random Matrices, Riemann-zeta function and Burgers Turbulence

**11:30**    **Coffee break**

**12:00**

**Mikhail Feigelman** (Landau). Level statistics and self-induced decoherence in disordered spin- $1/2$  systems

**13:00**    **Lunch**

### **Afternoon session. Chair:**

**15:00**

**Yuri Makhlin** (Landau). Topology of the planar phase of superfluid helium-3

**16:00**    **Coffee break**

**16:30**

**Vadim Ponomarenko** (Portugal). Braiding of anyonic quasiparticles in fractional edge-state Mach-Zehnder interferometer

**17:10**

**Andrey Katanin** (Ekaterinburg). Spin fluctuations in magnetically ordered layered systems

**Wednesday, July 13th**

**Morning session. Chair:**

**9:30**

**Grigory Volovik** (TU Helsinki & Landau). Flat bands in topological matter

**10:30**

**Alexander Ossipov** (Nottingham). Critical eigenstates of the long-range random Hamiltonians

**11:10 Coffee break**

**11:40**

**Valentin Kachorovskii** (Ioffe). Tunneling into a Luttinger liquid revisited

**12:20**

**Dmitri Aristov** (PNPI) Y-junction connecting Luttinger liquids: fixed point structure and conductances

**13:00 Lunch**

**Afternoon session. Chair:**

**15:00**

**Pavel Bolokhov** (Minneapolis). Curves of Marginal Stability in two-dimensional Supersymmetric Sigma Models

**15:40**

**Denis Grebenkov** (Paris). Localization of the Laplace operator eigenfunctions

**16:20 Coffee break**

**16:50**

**Dmitri Diakonov** (PNPI). Is there any torsion in your future?

**Closing and farewell party**