

Landau Days 2014
June 23 - June 25

Program

Program Committee:

Vladimir V. Lebedev
Eugene A. Kuznetsov
Vladimir P. Mineev
Grigory E. Volovik
Serge A. Krashakov (secretary)

Monday, 23 June

Session: In memory of Yuri Bychkov

09:00-09:20 **Eliashberg GM**

Yuri A. Bychkov - 48 Years in the Landau Institute

09:20-10:00 **Apel W**

Correlation functions of the anisotropic kagome Ising antiferromagnet

10:00-10:40 **Brazovskii S**

Electronic vortices in junctions and at surfaces of CDWs

10:40-11:10 Coffee break

11:10-11:50 **Chaplik AV**

Electrostatic screening in nanostructures

11:50-12:30 **Peschansky VG**

Angular magnetobreakdown oscillations in layered conductors

12:30-13:10 **Burmistrov IS**

Superconductor-metal/insulator transition in 2D electron systems with strong spin-orbit coupling

13:10-14:10 Lunch

14:10-14:50 **Timofeev VB**

Compensation of spin splitting of dipolar exciton bose gas

14:50-15:30 **Iordanskii SV**

The conductivity of the half filled Landau level

15:30-16:10 **Deviatov EV**

Electron transport through the interface between a 3D metal and a two-dimensional electron gas with strong spin-orbit coupling

16:10-16:40 Coffee break

16:40-17:20 **Dickmann S**

Excitonic representation for states in quantum Hall systems

17:20-18:00 **Byalko AV**

Dynamics of contemporary climate

Tuesday, 24 June

Session: In memory of Nikolay Kopnin

09:00-09:20 **Volovik GE**

Kopnin in Physics

09:20-10:00 **Heikkilä T, Volovik GE**

Towards room-temperature flat-band superconductivity

10:00-10:40 **Pekola J**

Kopnin and nanophysics experiments

10:40-11:10 Coffee break

11:10-11:50 **Mineev VP**

Half quantum vortices

11:50-12:30 **Skvortsov MA**

Ivlev-Kopnin phase-slip instantons

12:30-13:10 **Khaymovich IM**

Vortex core states within Coulomb blockade regime

13:10-14:10 Lunch

14:10-14:50 **Volovik GE**

Kopnin force and chiral anomaly

14:50-15:30 **Eltsov VB**

Kopnin theory and Helsinki experiments on rotating cryostat

15:30-16:10 **Theiler B, Geshkenbein VB, Korshunov SE, Blatter G**

Squaring the triangle - Structural transitions of 2D lattice on a substrate

16:10-16:40 Coffee break

16:40-17:20 **Melnikov AS**

Nikolay Kopnin and electronic structure of vortex state in superconductors: quasiclassical approach and beyond.

Wednesday, 25 June

Session: In memory of Sergey Manakov

09:00-09:20 Zakharov VE

Sergei Manakov and integrable systems

09:20-10:00 Zakharov VE, Zakharov DV

On the bounded solutions of integrable nonlinear wave equations

10:00-10:40 Kuznetsov EA, Zubarev NM

Singularity formation on a fluid interface during the Kelvin-Helmholtz instability development

10:40-11:10 Coffee break

11:10-11:50 Shabat AB

KdV revisited

11:50-12:30 Grinevich PG, Santini PM, Wu D

The Cauchy problem for the Pavlov equation

12:30-13:10 Bogdanov LV

Manakov-Santini hierarchy: geometry and reductions

13:10-14:10 Lunch

14:10-14:50 Pogrebkov AK

Noncommutative Hirota difference equation

14:50-15:30 Krichever IM

Spectral theory of periodic difference triangular operators

15:30-16:10 Mikhailov AV

Reductions in differential and difference integrable systems

16:10-16:40 Coffee break

16:40-17:20 Lushnikov PM

Nonlinear combining of laser beams through critical collapse

17:20-18:00 Sokolov VV

Polynomial forms of integrable quantum second order Hamiltonians with two independent variables