

**Landau Days 2015**  
**June 22 - June 25**

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**Program**

**Program Committee:**

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

Monday, 22 June

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- 09:00-09:35 **Brazovskii SA**  
*Solitons in electronic systems: four decades from theories to experiments*
- 09:35-10:10 **Kirova NN, Brazovskii SA**  
*Dynamical patterns of phase transformations from self-trapping of quantum excitons.*
- 10:10-10:45 **Бендерский ВА**  
*Наноразмерные эффекты в молекулярной электронике*

10:45-11:15 Coffee break

- 11:15-11:50 **Kukuskin IV**  
*Fermi-liquid effects and quasiparticle mass renormalisation in strongly interacting two-dimensional electron system*
- 11:50-12:25 **Кулик ЛВ, Gorbunov A, Zhuravlev AS, Тимофеев ВБ, Дикман С, Кукушкин ИВ**  
*Циклотронные “spin-flip” магнитоэкситоны и их коллективное поведение.*
- 12:25-13:00 **Burmistrov IS**  
*Multifractality and electron-electron interaction at Anderson transitions*

13:00-14:00 Lunch

- 14:00-14:35 **Ioselevich PA**  
*Josephson current between topological and conventional superconductors*
- 14:35-15:10 **Peschansky VG, Stepanenko DI**  
*Electron Transport in Layered Conductors under topological phase transition*
- 15:10-15:45 **Kats EI, Lebedev VV**  
*Non-linear fluctuation effects in dynamics of freely suspended film*

15:45-16:15 Coffee break

- 16:15-16:50 **Korshunov SE**  
*Nematic phase in magnetically frustrated arrays of SFS junctions*
- 16:50-17:25 **Willa R, Geshkenbein VB, Blatter G**  
*The Campbell length in the presence of strong vortex pinning*

Tuesday, 23 June

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09:00-09:35 **Korotkevich AO, Lukaschuk S**  
*Circular instability of a standing gravity-capillary wave: wave tank experiment*

09:35-10:10 **Gelash AA, Zakharov VE**  
*Theory of weak turbulence of inertial waves in rotating fluid*

10:10-10:45 **Kachulin DI, Zakharov VE, Dyachenko AI**  
*Dissipation of water waves and breakers*

10:45-11:15 Coffee break

11:15-11:50 **Fel'dman EB**  
*Multiple quantum NMR in one-dimensional and nanoscale systems: theory, computer simulations and experimental investigations*

11:50-12:25 **Фомин ИА**  
*Аэрогели в сверхтекучем  $^3\text{He}$*

12:25-13:00 **Eltsov VB**  
*Trapped Bose-Einstein condensates of magnons in superfluid  $^3\text{He-B}$*

13:00-14:00 Lunch

14:00-14:35 **Zakharov VE**  
*Complete integrability of the system of surface waves on deep water*

14:35-15:10 **Dyachenko SA, Dyachenko AI, Zakharov VE**  
*Free surface dynamics of 2D fluid and analytical functions*

15:10-15:45 **Lushnikov PM**  
*Branch Cut Singularity of Stokes Wave*

15:45-16:15 Coffee break

16:15-16:50 **Anisimov SI, Inogamov NA, Khokhlov VA, Migdal KP, Petrov YuV**  
*Thermal conductivity of condensed gold in states with the strongly excited electron subsystem*

16:50-17:25 **Anisimov SI, Inogamov NA, Khokhlov VA, Petrov YuV, Zhakhovskii VV**  
*Dynamics of ablation of gold film by ultrashort laser pulse*

17:25-18:00 **Anisimov SI, Inogamov NA, Zhakhovskii VV, Khokhlov VA, Petrov YuV**  
*Thin films under the action of short laser pulses*

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Tuesday, 23 June

Wednesday, 24 June

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- 09:00-09:35 **Рязанов ВВ, Голикова ТЕ, Егоров СВ, Батов ИЕ**  
*Нелокальные неравновесные эффекты в планарных джозефсоновских субмикронных структурах*
- 09:35-10:10 **Laurie J, Boffetta G, Falkovich G, Колоколов ИВ, Лебедев ВВ**  
*Образование когерентных вихрей в двумерной турбулентности*
- 10:10-10:45 **Belan SA**  
*Localization-delocalization transition in the distribution of inertial particles in wall-bounded random flows*

10:45-11:15 Coffee break

- 11:15-11:50 **Буалко AV**  
*MHD Rankine Vortex*
- 11:50-12:25 **Филатов СВ, Бражников М, Левченко АА**  
*Экспериментальное наблюдение формирования вихревого движения волнами на поверхности жидкости*
- 12:25-13:00 **Filatov SV, Parfenyev VM, Vergeles SS, Levchenko AA, Lebedev VV**  
*Non-linear generation of vorticity by surface waves*
- 13:00-13:30 **Agafontsev DS, Kuznetsov EA, Mailybaev AA**  
*Folding of vorticity field as a route to the Kolmogorov spectrum*

13:30-14:30 Lunch

- 15:00-18:00  
*Physics Foundation Presentations*

Thursday, 25 June

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- 09:00-09:35 **Kravtsov VE**  
*Multifractal properties of work distribution in a driven two-level system*
- 09:35-10:10 **Фейгельман MB**  
*Коллективные моды в сильно неупорядоченных сверхпроводниках*
- 10:10-10:45 **Yung AV**  
*Critical string from non-Abelian vortex in four dimensions*

10:45-11:15 Coffee break

- 11:15-11:50 **Mineev VP**  
*Reentrant superconductivity in URhGe*
- 11:50-12:25 **Volovik GE**  
*Heavy Higgs modes and little Higgs sector in superfluid  $^3\text{He}$*
- 12:25-13:00 **Григорьев ПД**  
*Рассеяние ультрахолодных нейтронов на поверхности жидкого гелия*

13:00-14:00 Lunch

- 14:00-14:35 **Лесовик ГБ**  
*Квантовая  $H$ -теорема и проблема стрелы времени*
- 14:35-15:10 **Andreev OD**  
*Model of the  $N$ -Quark Potential in  $SU(N)$  Gauge Theory using Gauge-String Duality*
- 15:10-15:45 **Пугай ЯП**  
*Локальные операторы в точно решаемых двумерных теориях поля и представление свободными полями*

15:45-16:15 Coffee break

- 16:15-16:50 **Лашкевич МЮ**  
*Сохраняющиеся токи в возмущенных минимальных конформных моделях*
- 16:50-17:25 **Белавин АА, Spodyneiko L**  
*Пространственно-временная суперсимметрия и  $N=2$  суперконформная симметрия на мировом листе в теории струн*
- 17:25-18:00 **Litvinov AV**  
*Liouville reflection operator and integrable structure of conformal field theory*