

The program of the international workshop «Monte Carlo methods in computer simulations of complex systems»

School of Biomedicine, FEFU, office 707 12-24 October 2014

| Time | Speaker | Title | |
|-------------------------------|---|---|--|
| | Monday 19 October 2015 | | |
| 10:00-11:00 | E. Bratkovskaya "QCD and heavy-ion collisions" | | |
| 11:00-11:30 | Coffee-break | | |
| 11:30-12:00 | A. Kotov, ITEP | "Lattice simulation of two-color QCD at non-zero baryon density" | |
| 12:00-12:30 | A. Nikolaev, FEFU / ITEP | "Canonical approach in lattice QCD with finite baryon and charge chemical potentials" | |
| 12:30-13:00 | Discussion | | |
| 13:00-15:00 | Lunch | | |
| 15:00-16:00 | M. Chernodub, University of Tours / FEFU | "Chiral Waves in Chiral Media " | |
| 16:00-16:30 | Coffee-break | | |
| 16:30-17:00 | E. Luschevskaya, ITEP, Moscow FEFU | Computer modelling of (anti)hydrogen sympathetic cooling by Monte-Carlo method | |
| 17:00-18:30 | Discussion of joint projects with QCDSF | | |
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| | Tuesday 20 October 2014 | | |
| 10:00-11:00 room 624 | G. Schierholz, DESY, Hamburg | The electric dipole moment of the neutron from lattice QCD | |
| 11:00-11:30 room 624 | S. Polikarpov, ITEP | Some applications of Monte-Carlo methods in experimental B-physics | |
| 11:30-12:00 | Coffee-break | | |
| 12:00-13:00 | R. Horsley, Edinburgh University | A Feynman-Hellmann approach to the spin structure of hadrons | |
| 13:00-15:00 | Lunch | | |
| 15:00-16:00 | V. Zakharov, ITEP / FEFU | Towards theory of liquids in terms of scalar fields | |
| 16:00-16:30 | Coffee-break | | |
| 16: \mathbb{M} 0-17:30 | M. Chernodub, University of / FEFU | "Chiral Waves in Chiral Media " | |
| 17:30-19:00 | Discussion on QCD at finite temperature and / or finite density | | |
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| | Wednesday 21 October 2015 | | |
| 10:00-11:00 | V. Zakharov, ITEP / FEFU | Towards theory of liquids in terms of scalar fields | |

| 11:00-11:30 | Coffee-break | | |
|----------------------------|---|---|--|
| 11:30-12:30 | A. Nakamura RCNP / FEFU Lee-Yang zeros and QCD phase transition | | |
| 12:30-13:00 | Discussion | | |
| 13:00-15:00 | Lunch | | |
| 15:00-16:00 | M. Ilgenfritz, JINR, Dubna | Lattice study of gluon and ghost | |
| | , , | propagators in Landau gauge QCD | |
| 16:00-16:50 | Coffee-break | | |
| 16:50-17:50 | B. Martemyanov, ITEP / MPTI | From instanton to caloron (lecture for | |
| | | students, in Russian) | |
| | | От инстантона до калорона | |
| | | наших дней | |
| 17:50-19:00 | Discussion of QCD at finite temperature and / or finite density | | |
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| | Thursday 22 October 2015 | | |
| 10:00-11:00 | Discussion of the collaborative projects (gradient flow, topological | | |
| 10.00-11.00 | fluctuations, equation of state) | | |
| 11:00-11:30 | D. Boyda, FEFU / ITEP | Numerical study of graphene | |
| 11.00 11.50 | 2. 20yuu, 1210 / 1121 | electronic properties | |
| 11:30-12:30 | R. Rogalyov, IHEP / FEFU | Fitting of experimental data | |
| | <i>5 y</i> | (lecture for students, in Russian) | |
| | | Подгонка (фитирование) | |
| | | экспериментальных данных | |
| 12:30-13:00 | Discussion | | |
| 13:00-15:20 | Lunch | | |
| 15:20-16:20 | O. Pavlovsky MSU/FEFU/ITEP | Qualitative Computational Neurobiology: | |
| | | is our brain a statistical machine? | |
| | | (lecture for students, in Russian) | |
| | | Качественная вычислительная | |
| | | нейробиология: является ли наш мозг | |
| 16.20 16.50 | C-1 | статистической машиной? | |
| 16:20-16:50 16:50-19:00 | Coffee-break | | |
| 10.30-19.00 | Discussion of the collaborative projects (propagators and vertices in Landau and MA gauges) | | |
| | and MA | 5uu5co) | |
| | Friday 23 October 2015 | | |
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| 10:00-11:00 | Discussion of the collaborative projects | | |
| 11:00-11:30 | Coffee-break | | |
| 11:30-13:00 | Discussion of the collaborative projects | | |
| 13:00-15:00 | Lunch | | |
| 15:00-16:00 | Discussion of the collaborative projects | | |
| 16:00-16:30 | Closing of the Workshop | | |
| | Saturday 24 October 2015 | | |
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| | Departure of the participants | | |