International Conference – Международная конференция
"Integrable Systems and Nonlinear Dynamics"
"Интегрируемые системы и нелинейная динамика"

Programme – Программа

Monday, October 1 – Понедельник, 1 октября

12:30-14:00 Registration of participants – Регистрация участников

14:00-14:10 Welcoming address from the organisers – Приветственные слова организаторов

14:10-15:10 Victor Buchstaber: *Integrable Hamiltonian polynomial systems defined by hyperelliptic curves* (joint work with Mikhailov A.V.)

15:10-16:10 Dmitry Treschev: *On a quantum heavy particle*

16:10-16:40 *Coffee break – Кофе-брейк*

16:40-17:10 George Papamikos: *Formal and exact Darboux transformations for vector mKdV and related equations*

17:10-17:40 Sergei Kashchenko: *Local rapidly oscillating solutions of the dislocation problem* (joint work with Glyzin S.D. and Tolbei A.O.)

17:40-18:10 Andrei Pogrebkov: *Higher Hirota difference equations and their reductions*

18:10-18:30 Il'ya Kashchenko: *Normalisation of the parabolic equation with small diffusion and strong nonlinearity*

Tuesday, October 2 – Вторник, 2 октября

09:40-10:00 *Coffee – Кофе*

10:00-11:00 Lev Lerman: *Bifurcations in 3 d.o.f. integrable Hamiltonian systems*

11:00-11:20 *Coffee break – Кофе-брейк*

11:20-12:20 Nikolai Dolbilin: *Delone sets and crystalline structure*

12:20-12:50 Alexander Orlov: *Hurwitz numbers and matrix integrals labeled with chord diagrams*

12:50-14:20 *Lunch – Обед*

14:20-15:20 Vladimir Sokolov: *Integrable non-abelian quadratic ODEs*

15:20-16:20 Sergei Igonin: *Infinite-dimensional Lie algebras associated with partial differential equations and Bäcklund transformations*

16:20-16:40 *Coffee break – Кофе-брейк*

16:40-17:10 Sergei Glyzin: *Quasi-stable structures in circular chains of unidirectionally coupled oscillators* (joint work with Kolesov A.Yu. and Rozov N.Kh.)

17:10-17:40 Vakha Gishlarkaev: *Fourier transform method for some types of linear partial differential equations with variable coefficients*

17:40-18:10 Alexei Borisov: *New integrable systems of nonholonomic dynamics* (joint work with Kilin A.A. and Mamaev I.S.)

19:00-22:00 *Conference dinner – Банкет*

Wednesday, October 3 — Среда, 3 октября

12:00-15:00 *Excursion or free time — Экскурсия или свободное время*

15:00-16:10 *Lunch — Обед*

16:10-16:40 Andrey Oshemkov: *Enumeration of non-degenerate rank 0 singularities for integrable Hamiltonian systems with three degrees of freedom*

16:40-17:00 *Coffee break — Кофе-брейк*

17:00-18:00 Valery Kozlov: *Integrable systems and tensor invariants*

18:00-18:30 Pavel Ryabov: *Topological atlas of integrable problems of rigid body dynamics* (joint work with Sokolov S.V.)

Thursday, October 4 — Четверг, 4 октября

09:40-10:00 *Coffee — Кофе*

10:00-11:00 Dmitry Talalaev: *Dynamics in neural networks and integrable systems*

11:00-11:20 *Coffee break — Кофе-брейк*

11:20-11:40 Ivan Kozlov: *Integrable systems and low-dimensional affine manifolds*

11:40-12:00 Victoria Vediushkina: *The topology of the Liouville foliation of the isoenergy surface of the simple billiard book*

12:00-12:20 Irina Kharcheva: *Realization of 3-atoms by integrable billiard's books*

12:20-12:40 Ekaterina Karginova: *Topologial billiards bounded with arcs of confocal quadrics on Minkowski plane in terms of Fomenko-Zieschang invariants*

12:40-13:00 Victor Moskvin: *Integrable billiards with nonconvex angles on the boundary*

13:00-14:30 *Lunch — Обед*

14:30-15:30 Ian Marshall: *Action-angle duality via Hamiltonian reduction*

15:30-16:10 Georgy Sharygin: *Full symmetric Toda system and geometry of real Bruhat cells*

16:10-16:30 *Coffee break — Кофе-брейк*

16:30-17:00 Boris Bychkov: *Polynomial graph invariants and linear hierarchies*

17:00-17:30 Nadezhda Timofeeva: *On universal space of parameters for compact torus actions on Grassmannians*

17:30-18:00 Vladimir Bondarenko: *On polynomial solvability of integer recognition problem* (joint work with Nikolaev A.V.)

18:00-18:20 Mikhail Tuzhilin: *Criterion of component-wise stability of 2n-dimensional saddle singularities in integrable Hamiltonian systems*

Friday, October 5 — Пятница, 5 октября

09:40-10:00 *Coffee — Кофе*

10:00-10:30 Andrei Shafarevich: *Semiclassical quantization of complex vector bundles over singular invariant curves of Hamiltonian systems*

10:30-10:50 Anna Allilueva: *Classical dynamics on a graph and semiclassical eigenfunctions of*

the Schrödinger operator that are localized near a subgraph

10:50-11:20   Elena Kudryavtseva: *Classifying superintegrable Bertrand mechanical systems*

11:20-11:40   ***Coffee break – Кофе-брейк***

11:40-12:40   Tomoo Yokoyama: *Decompositions of surfaces flows and their applications*

12:40-13:00   Natalia Levashova: *The autowave front stating in the discontinuous media* (joint work with Orlov A.O.)

13:00-13:20   Alina Melnikova: *Development of the differential inequalities method for nonlinear activator-inhibitor systems*

13:20-13:40   Pavel Nesterov: *Dynamical systems with oscillatory decreasing coefficients: certain problems of asymptotic integration theory*

13:40-15:00   ***Lunch – Обед***

15:00-17:00   ***Poster session – Постеры (стендовые доклады)***

17:00-17:40   ***Coffee break / Conference end – Кофе-брейк / Завершение конференции***