

Program

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Please contact to the organizers if you see some mistakes and/or collisions with your own schedule.

August 19

Euler Institute, Pesochnaya nab. 10
The link to the Zoom channel of AMCM is in your [personal account](#)

09:30 — 10:25	Registration, coffee
10:25 — 10:30	Opening ceremony
10:30 — 11:10	Elena Polyakhova , Andrei Vasiliev, Denis Mikryukov, Igor Nikiforov, Boris Eskin (Saint-Petersburg State University, mathematical and mechanical faculty) Professor K.V. Kholoshevnikov as a historian of science
11:10 — 11:40	Husein Krayani (Peter the Great St.Petersburg Polytechnic University) On the paper of K.V. Kholoshevnikov about the exactness of epicyclic theory
11:40 — 12:10	Coffee break
12:10 — 12:40	Vyacheslav Ivashkin (Keldysh Institute of Applied Mathematics) K.V. Kholoshevnikov and the Euler-Lambert problem of constructing the orbit of a body based on its two positions
13:00 — 15:00	Lunch
15:00 — 15:30	Eduard Kuznetsov (Ural Federal University) Semi-analytical theories of motion for the study of the dynamical evolution of planetary systems
15:30 — 16:10	Vladimir Titov (Saint-Petersburg State University) General three body problem in the shape space
16:10 — 16:40	Coffee break
16:40 — 17:10	Vakhit Shaidulin (Saint Petersburg state university) Collocation integrator based on Legendre polynomials
17:10 — 17:40	Nikita Petrov (Saint-Petersburg State University) Dangerous asteroids and the study of their orbits
18:15 — 21:30	Welcome party

August 20

10:00 — 10:30	Alexander Bruno , Alexander Batkhin (Keldysh Institute of Applied Mathematics) On Types of Stability in Hamiltonian Systems
10:30 — 11:00	Victor Edneral (Lomonosov Moscow State University) On the integrability of dynamical models with quadratic right-hand side
11:00 — 11:20	Coffee break
11:20 — 11:50	Nikolay Vassiliev (St.Petersburg Department of Steklov Mathematical Institute) A natural riemannian metric on the space of Keplerian orbits based on the Hausdorff metric.
11:50 — 12:30	Alexander Batkhin , Cengiz Aydin (Department of Aerospace Engineering, Technion – Israel Institute of Technology) Network of families of symmetric spatial periodic orbits in the Hill problem via symplectic invariants
12:30 — 13:00	Sergey Gutnik (Moscow State Institute of International Relations (MGIMO University)) Periodic Oscillations of a Two-Body System in the Plane of the Elliptic Orbit
13:00 — 15:00	Lunch
15:00 — 15:30	Ivan Mamaev , Ivan Bizyaev (Kalashnikov Izhevsk State Technical University) Dynamics of self-gravitating ellipsoids
15:30 — 16:10	Pablo Cincotta (University of La Plata) Chaotic diffusion in a triaxial galactic model: an example of global stable chaos
16:10 — 16:40	Coffee break
16:40 — 17:10	Igor Nikiforov (Saint Petersburg State University) 4D modeling of the kinematics of a selected subsystem of the Milky Way
17:10 — 17:40	Alexander Batkhin , Alexander Petrov (Department of Aerospace Engineering, Technion – Israel Institute of Technology) On Algorithms of Hamiltonian Normal Form

August 21

10:00 — 10:50	Sergey Bolotin (Moscow Steklov Mathematical Institute of RAS) Chaotic behavior in the generalized n-center problem
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10:50 — 11:20	Coffee break
11:20 — 12:00	Tatiana Salnikova (Lomonosov Moscow State University) Localized trajectories of cosmic particles near libration points
12:00 — 12:30	Vasily Nikonov , Alexander Burov (Federal Research Center "Computer Science and Control" of the Russian Academy of Sciences) Finite-point approximations of fields of attraction and their verification
12:30 — 13:00	Lubov Lapshenkova , Mikhail Malykh, and Marina Konyaeva (Peoples' Friendship University of Russia) On the algebraic properties of difference approximations of Hamiltonian systems
13:00 — 15:00	Lunch
15:00 — 15:30	Eleonora Yagudina , Margarita Lebedeva (Institute of Applied Astronomy of the Russian Academy of Sciences) The ephemeris of the Moon in the framework of the numerical theory of Solar system bodies EPM
15:30 — 16:00	Alexey Rosaev (Yaroslavl State University) A new example of stable chaotic orbit in asteroid belt
16:00 — 16:30	Shamil Biktimirov , Fatima Alnaqbi (Technology Innovation Institute) Remote Sensing Satellite Constellation Design Based on Repeat Ground Track Orbits Properties
16:30 — 16:55	Coffee break
Poster session.	
	Irina Tupikova (Lohrmann Observatory) Towards understanding the astronomical orientation of the Old Kingdom pyramids
	Tamara Ivanova (Institute of Applied Astronomy of the Russian Academy of Sciences) Constructing the Secular System in the Three-Axial Moon's Rotation Theory in the Trigonometrical Form
	Nikolai Kirsanov (Kantele) The case of János Sajnovics as a milestone in history of astronomy, the study of which was inspired by the lectures of Prof. K.V. Kholshevnikov
	Tamara Vinogradova (Institute of Applied Astronomy) Lidov-Kozai mechanism in 3:2 and 1:1 resonances

August 22

10:00 — 10:30	Vladislav Sidorenko (Keldysh Institute of Applied Mathematics RAS) Adiabatic approximation in dynamical studies of exoplanetary systems in mean-motion resonance
10:30 — 11:00	Pavel Krasilnikov , Alexander Dobroslavskiy (Moscow Aviation Institute (National Research University)) On the Evolution of Asteroid Orbit in the Restricted Circular Three-Body Problem: External and Internal Cases, New Results
11:00 — 11:30	Coffee break
11:30 — 12:00	Evgeny Smirnov (Belgrade Astronomical Observatory) Identifying mean-motion and secular resonances with large language models and classical machine learning
12:00 — 12:30	Tomilova I.V. , Bordovitsyna T.V., Aleksandrova A.G., Blinkova E.V., Popandopulo N.A. (National Research Tomsk State University) Numerical-analytical approach to the study of resonant structures of nearplanetary orbital spaces
12:30 — 13:00	Vladimir Grinin (Pulkovo Astronomical Observatory of RAS) Periodic phenomena in photometric activity of young stars and formation of resonance structures in circumstellar disks
13:00 — 14:30	Lunch
15:00 — 18:30	Bus Excursion
18:30 — 22:00	Conference dinner

August 23

10:00 — 10:40	Vladislav Sidorenko (Keldysh Institute of Applied Mathematics RAS) Lerman separatrix map for the problem of satellite attitude motion
10:40 — 11:10	Denis Mikryukov , Ivan Shevchenko (Saint-Petersburg State University) The effect of encounters with interstellar objects of planetary and substellar masses on the Solar system dynamics
11:10 — 11:30	Coffee break
11:30 — 12:00	Alexander Melnikov , Kristina Lobanova (Pulkovo observatory) On perturbations in the rotational dynamics of small asteroids during close approaches to the Earth
12:00 — 12:30	Tatiana Sannikova (Crimean Astrophysical Observatory, Russian Academy of Sciences) Norm of orbit displacement in a problem with perturbing

acceleration varying inversely with the square of the heliocentric distance

12:30 — 13:00	Vladislav Topinskiy , Roman Baluev (Saint Petersburg State University) Neural network simulating the Schuster periodogram
13:00 — 14:30	Lunch
14:30 — 15:00	Valerij Romanovskij (CAMTP and University of Maribor) Normal forms of polynomial systems
15:00 — 15:30	Ivan Bizyaev (Udmurt State University) Bifurcation diagram and a qualitative analysis of particle motion in a Kerr metric
15:30 — 16:00	Pavel Ivanov (Petr Nikolaevich Lebedev Physical Institute of the Russian Academy of Sciences) A non-dissipative tidal evolution of stellar inclination axis in eccentric inclined close binary systems
16:00 — 16:30	Coffee break
16:30 — 17:00	Alexey Ivanyukhin (Research Institute of Applied Mechanics and Electrodynamics of Moscow Aviation institute) Transit trajectories of ballistic capture near libration points for low-energy transfers
17:00 — 17:30	Alexander Petrov (Ishlinsky Institute for Problems in Mechanics RAS) Approximate gyroscope theory and application for the space objects
17:30 — 17:55	Dmitry Pavlov (St. Petesburg State Electrotechnical University) General relativity tests in a dynamical model of the Solar system
	Round table discussion . Coffee
	Business meeting, Information about future of AMCM.
	Close of the Conference.