

# SIXTH INTERNATIONAL SYMPOSIUM ON CLASSICAL AND CELESTIAL MECHANICS

## First communication and call for papers<sup>☆</sup>

---

The symposium is planned for the 1–6 August 2007 in the suburbs of Velikiye Luki (Russia).

The chairman of the symposium committee is Academician V. V. Rumyantsev. The Russian Academy of Sciences (RAS), the A. A. Dorodnitsyn Computer Centre of the RAS, the M. V. Lomonosov State University, Moscow, and the Moscow Aviation Institute are taking part in the organization of the symposium. The symposium is being held with the support of the ELVO Holding Company, Velikiye Luki, and the ZETO Joint Stock Company, general director N. N. Kozlovskii.

The symposium in Velikiye Luki has become a traditional gathering of mathematicians, applied mathematicians and engineers working in various fields of science and industry. It provides an opportunity to discuss problems of the interdisciplinary interaction necessary when solving actual technical problems. The topics of the scientific papers cover the theory of dynamical systems, the theory of stability and bifurcations, three-body problems,  $N$ -body problems, problems of the dynamics of solids and deformable bodies, modelling methods, cosmodynamics and related engineering problems.

**The scientific programme includes plenary papers and section papers within the framework of four minisymposia on the following topics:**

- 1 Classical mechanics.
  - 1.1 Analytical mechanics.
  - 1.2 Theory of stability and bifurcations.
  - 1.3 Regular and chaotic dynamics.
  - 1.4 Vibrations of mechanical systems.
- 2 Celestial mechanics.
  - 2.1 Three- and  $N$ -body problems.
  - 2.2 Periodic and nominally periodic orbits – resonances.
  - 2.3 Dynamics of planets of the solar system.
  - 2.4 Dynamics of the rotational motion of celestial bodies.
  - 2.5 Dynamics of orbital systems.
- 3 Systems of rigid and/or deformable bodies.
  - 3.1 Analysis of the dynamics of systems of rigid/deformable bodies.
  - 3.2 Contact problems, impacts, friction.

---

<sup>☆</sup> *Prikl. Mat. Mekh.* Vol. 71, No. 1, p. 172, 2007.

- 3.3 Computer formalisms and computer modelling.
- 3.4 Analysis of oscillations and vibrations.
- 3.5 Control problems in the dynamics of systems of rigid bodies
- 4 Related engineering applications.
  - 4.1 Dynamics of the motor vehicle.
  - 4.2 Dynamics of the railway carriage.
  - 4.3 Dynamics of aerospace systems.
  - 4.4 Electromechanical systems.
  - 4.5 Dynamic processes in power engineering systems.

More detailed information can be obtained from the website of the symposium: [www.ccas.ru/CCMECH6](http://www.ccas.ru/CCMECH6).

*Translated by P.C.*