



SEMINAR PROJEKTA #OI 171020  
LABORATORIJA ZA FIZIKU ATOMSKIH SUDARNIH PROCESA

U sredu, 26.10.2018. sa početkom u 12 časova u sali “Dragan Popović” Instituta za fiziku u Beogradu održaće se seminar:

**“Symmetry phenomena in finite quantum systems: periodic orbits and quantum degeneracy”**

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We discuss symmetry effects produced by interplay of regular and chaotic dynamics of particles confined by effective potentials of various shapes in finite quantum systems. It is demonstrated that dynamical symmetries emerging from this interplay in classical and quantum systems are related to existence of conserved quantities of the dynamics and integrability. Important role of these symmetries are illustrated on a broad class of mesoscopic systems that include octupole deformed many body systems such as nuclei and clusters, and quantum dots in a magnetic field (see for a review [1]).

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- [3] R. G. Nazmitdinov and N. S. Simonovic, *Entanglement as an Indicator of a Geometrical Crossover in a Two-Electron Quantum Dot in a Magnetic Field*, *Pis'ma v ZhETF* **97** (2013) 226 and also in: *JETP Lett.* **97** (2013) 199–204.
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