## IV RUSSIAN-SPANISH CONGRESS: Particle, Nuclear, Astroparticle Physics and Cosmology



Monday, 4 September 2017 - Friday, 8 September 2017

## **Scientific Programme**

The following topics will be within the scope of the Workshop:

## - Strong interactions of hadrons at high energies accessible on Large Hadron Collider.

- Relativistic Heavy Ion Physics on LHC and RHIC and predictions of new phases in hot and dense nuclear matter.

- Low and intermediate energy hadron physics: effective Lagrangians and realizations of CP breaking.

- AdS/CFT and AdS/QCD correspondence in Quantum Field and String Theory and Holographic models of Strong Interactions.

- Search for Physics beyond the Standard Model at ultra-high energies both on colliders and on space located installations.

- Modern Cosmology, Dark Energy and theoretical implications on Extra Space dimensions and deviations from Newtonian dynamics.

- Dark Matter in the Universe and Axion manifestation.

## - Integrability in Quantum Mechanics and Quantum Field Theory.

- Nuclear physics of neutron rich nuclei.