

**THE INCA COLLABORATION:
PRESENT STATUS AND PERSPECTIVES**

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The INCA Collaboration develops a new technique based on the ionization-neutron calorimeter combining properties of conventional ionization calorimeters and classical neutron monitors to study local nearby sources of high-energy cosmic rays by measuring the spectrum and composition of the nuclear component in the energy range 0.1 – 10 PeV (the "knee" region) and the spectrum of primary electrons in the energy range 0.1–10 TeV with the proton-background suppression factor up to 10^7 ; to provide new information on the cosmic-ray gamma-radiation at energies of 30 – 1000 GeV, neutrons and gamma-rays from solar flares. To verify the INCA concept, a prototype of balloon-borne device was constructed and exposed to electron, pion, and proton accelerator beams at various energies. Results of comparison of experimental and simulated results are presented. Perspectives are considered.