Contribution ID : 120 Type : not specified

Solar Influence on Decay Rate (SIDR) Experiment

Wednesday, 7 October 2015 14:30 (30)

The goal of the proposed experiment is to check the evidence for a possible solar influence on nuclear decay rates, and to measure any effect quantitatively. Simultaneous decay rate measurements with many identical radioactive sources would allow us to study any possible correlations between their rate changes, and thus to improve the accuracy and reliability of the measurements. Positioning the sources with various distances between them (up to 2000 km), and at different altitudes above sea level and underground, will help to determine which particles, rays and other outside influences can be responsible for nuclear decay rate changes (if they really exist).

Presentation type

Poster

Primary author(s): Dr. VORONIN, Alexander (SINP MSU); Prof. FISCHBACH, Ephraim (Purdue University); Dr. BASHINDZHAGYAN, GEORGY (Lomonosov Moscow State University); Dr. HOVSEPYAN, Gagik (Yerevan Physics Institute); Dr. MERKIN, Mikhail (SINP MSU); Dr. KOROTKOVA, Natalia (Lomonosov Moscow State University); Dr. SINEV, Nikolai (University of Oregon); Prof. BARNES, Virgil (Purdue University)

Presenter(s): Dr. BASHINDZHAGYAN, GEORGY (Lomonosov Moscow State University)

Session Classification: Poster session II

Track Classification: Methods of experimental physics