Contribution ID : **238** Type : **Plenary/section talk**

Search for sterile neutrinos on the Gallium Germanium Neutrino Telescope with artificial neutrino sources

Thursday, 13 October 2016 14:30 (15)

The current status of the short baseline experiment BEST with a 3MCi 51Cr artificial neutrino source to search for transitions of electron neutrinos to sterile states on the Gallium Germanium Neutrino Telescope at the Baksan Neutrino Observatory INR RAS is presented. The experiment has the great potential to search for transitions of active neutrinos to sterile states with Δm2˜ 1 eV2 and to set the limits on short baseline electron neutrino disappearance oscillation parameters. The possibilities of the further constraints of the oscillation parameters region with use of 65Zn source are discussed.

Primary author(s) : Prof. GAVRIN, Vladimir (INR RAS)

Co-author(s) : Dr. SHIKHIN, Alexander (INR RAS); Dr. KALIKHOV, Anatoly (INR RAS); Prof. CLEVELAND, Bruce (SNOLAB, Canada); Dr. VERETENKIN, Evgeny (INR RAS); Dr. MIRMOV, Ilya (INR RAS); Dr. KOZLOVA, Julia (INR RAS); Dr. IBRAGIMOVA, Tatiana (INR RAS); Dr. GORBACHEV, Valery (INR RAS)

Presenter(s) : Prof. GAVRIN, Vladimir (INR RAS)

Session Classification : Nuclear physics and particle physics - parallel VI

Track Classification : Nuclear physics and particle physics