

Analysis of hypernuclei production in MC data for the BM@N experiment

Monday 27 October 2025 14:15 (15 minutes)

The fixed target experiment BM@N is the first operational experiment at the NICA accelerator complex. One of the main physics goal of the experiment is study of production of hyperons and hypernuclei. This work is devoted to reconstruction the 3HL and 4HL hypernuclei in two-particle meson decays. A V0 reconstruction algorithm is proposed, the selection of geometric constraints is optimized and the efficiency of the proposed algorithm is estimated for both hypernuclei. Further continuation of this work involves comparison with experimental data obtained with a 3.8 AGEV xenon beam in 2023.

Author: КОНСТАНТИНОВА, Елизавета (Николаевна)

Presenter: КОНСТАНТИНОВА, Елизавета (Николаевна)

Session Classification: Elementary Particle Physics and High-Energy Heavy Ion Physics

Track Classification: Elementary Particle Physics and High-Energy Heavy Ion Physics