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## The Simulation of cosmic rays in EUSO-Balloon: performances of the direction and energy reconstruction

Tuesday 4 August 2015 16:00 (1 hour)

The EUSO–Balloon experiment is being developed as a pathfinder for the JEM–EUSO mission. In this framework we are developing a series of balloon flights, with a rescaled version of the JEM–EUSO detector, to be deployed at 40 km height. In view of a long duration flight, we estimate the

feasibility of detecting real cosmic ray events. In this contribution we evaluate the energy and direction reconstruction performances for the EUSO–Balloon mission. We simulate several samples of EeV cosmic ray events, including the detector, and we apply the algorithms to reconstruct their energy and direction. We therefore show results on the energy and direction resolution and give an estimate of the fraction of good quality events with respect to the triggered

events.

## Collaboration

JEM-EUSO

## Registration number following "ICRC2015-I/"

443

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