

Hadron Beams on Nuclear Targets

Olaf Hartmann

Stefan-Meyer-Institute, Austrian Academy of Sciences

Abstract

~~~~~

FLUKA has been used to calculate reactions by pion and antiproton beams on hydrogen and heavier nuclear targets. The main purpose is the evaluation of the background from light and strange hadrons. In the case of antiproton induced reactions, the FLUKA results are compared to transport model based calculations (such as UrQMD of the Frankfurt group). It is planned to use FLUKA to determine the radiation load to the detectors for various operating scenarios of the HESR-PANDA experiment which is part of FAIR, the new centre of hadron and ion physics to be built at the site of the GSI Darmstadt, Germany. The present status of this work will be discussed.