Contribution ID: **90** Type: **Talk**

【313】The Injection Channel of the muEDM Experiment

Tuesday 5 September 2023 17:15 (15 minutes)

At the Paul Scherrer Institute we are setting up an experiment to search for the muon EDM. This talk focuses on the off-axis injection of the muons into a $3T$ storage solenoid. The injection channel needs to be magnetically shielded, so muons can pass from the exit of the beamline, low magnetic field region, into the high magnetic field region of the solenoid. In the fringe magnetic field, below 1T, we will use an iron tube, while inside the solenoid bore, above 1T, we will use a superconducting (SC) shield. The effectiveness of three SC-shield prototypes will be tested by measuring their shielding factors and calculating the muon injection efficiency.

Theoretical Work

Author: DOINAKI, Anastasia

Co-author: Dr SCHMIDT-WELLENBURG, Philipp

Presenter: DOINAKI, Anastasia

Session Classification: Nuclear, Particle- & Astrophysics (TASK - FAKT)

Track Classification: Nuclear, Particle- and Astrophysics (TASK)