

## Update on the Targetry and Beamlines of MELODY

*Tuesday 22 August 2023 16:50 (20 minutes)*

Since the approval of MELODY in early 2023, the collection of surface muons and pions and the relevant beamlines have been revised.

In this report, we would like to present our latest studies at MELODY: i) For the target station, a) the optimization in terms of yields and material of the rotated target that is currently preferred and combined with the new sideways collection of both muons and (for the future) pions at an angle of 90 deg. and 270 deg. respectively, with respect to the primary protons, b) the cooling and maintenance scenarios, and c) the radiation shielding studies. ii) For the beamlines, the revised layout and optimization of the surface muon beamline including the beam monitoring studies. The decay muon beamline, foreseen as a future upgrade, will also be discussed.

**Primary author:** VASSILOPOULOS, Nikolaos

**Presenter:** VASSILOPOULOS, Nikolaos

**Session Classification:** parallel (room#101)

**Track Classification:** WG3: Accelerator Physics