

Simulation of beam interaction with thin wires - FLUKA and COMSOL codes

Wednesday 21 June 2023 10:50 (20 minutes)

Calculation of the energy loss of an incident beam in a thin wire is the first step if we want to assess the thermal behaviour of the wire during the scan process. We will present these calculations with the FLUKA code and the choice of key parameters to get realistic results. Simulations at specific energies for SPS (450 GeV), LHC (7 TeV) and FCC (50 TeV) were performed with different densities and C-Fe weight content and will be discussed. Thermal behaviour will also be quickly broach.

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Session Classification: Simulations