PARTICLE FLUX CALCULATIONS

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OUTLINE

- Model update
- Particle flux calculations
- Energy spectra and time distributions
MODEL UPDATE

- Beam stopper update
- Energy and angular beam distributions
- Scintillator detectors:
  0 degree (830 cm from interaction point),
  10 degree (600 cm from interaction point and 100 cm from beam),
  90 degree (100 cm from beam axes)
Total flux in $1/cm^2/3 \cdot 10^{13}$ protons. YZ projection.
Total flux in $1/cm^2 \cdot 10^{13}$ protons. XZ projection.
Charged hadron flux in $1/cm^2/3 \cdot 10^{13}$ protons. YZ projection.
Charged hadron flux in $1/cm^2/3 \cdot 10^{13}$ protons. XZ projection.
Neutron flux in $1/cm^2/3 \cdot 10^{13}$ protons. YZ projection.
Neutron flux in $1/cm^2 \cdot 10^{13}$ protons. XZ projection.
Gamma flux in $1/cm^2/3 \cdot 10^{13}$ protons. YZ projection.
Gamma flux in $1/cm^2/3 \cdot 10^{13}$ protons. XZ projection.
Muon flux in $1/cm^2 \cdot 10^{13}$ protons. YZ projection.
Muon flux in $1/cm^2 \cdot 10^{13}$ protons. XZ projection.
Electron flux in $1/cm^2/3 \cdot 10^{13}$ protons. YZ projection.
Electron flux in $1/cm^2/3 \cdot 10^{13}$ protons. XZ projection.
ENERGY SPECTRA AT 90 DEGREE

Energy spectra at 90 degree

Energy spectra of charged particles at 90 degree
TIME DISTRIBUTIONS AT 90 DEGREE
ENERGY SPECTRA AT 10 DEGREE

Energy spectra at 10 degree

Energy spectra of charged particles at 10 degree
TIME DISTRIBUTIONS AT 10 DEGREE

Time distributions at 10 degree

Time distribution of charged particles at 10 degree
ENERGY SPECTRA AT 0 DEGREE

Energy spectra at 0 degree

Energy spectra of charged particles at 0 degree
ANGULAR DISTRIBUTIONS

Angular distributions at 10 degree

Angular distributions at 90 degree
ENERGY SPECTRA AT 0 DEGREE
TIME DISTRIBUTIONS AT 0 DEGREE

Time distributions at 0 degree

Time distribution of charged particles at 0 degree