W-target: 0.3mm

Separation magnet

Compton $\gamma$-rays (Emax: 56 MeV)

SP1 (20 deg)

SP2 (12 deg)

Entrance of the SP2 (12 deg)

$P = 40$ MeV/c
This graph shows the energy of positrons as a function of the horizontal position on the entrance of the SP2 (12 deg). The energy of positrons become high as the horizontal position increases from -5cm. When the horizontal position is over 1cm, these energy become relatively low.
This graph shows the polarization of positrons as a function of the horizontal position on the entrance of the SP2 (12 deg). The polarization becomes the maximum value around 1.5cm. Therefore the average polarization decreases when the slit position is over 1cm.
These positrons with large angle keep away from the slit and reach the exit of the separation magnet. Their polarization is not so high because they have relatively low energy.