

Separation and polarity in IP2

■ Crossing angle:

- Follows sign of spectrometer angle
- Polarity change implies flip of sign (same size)

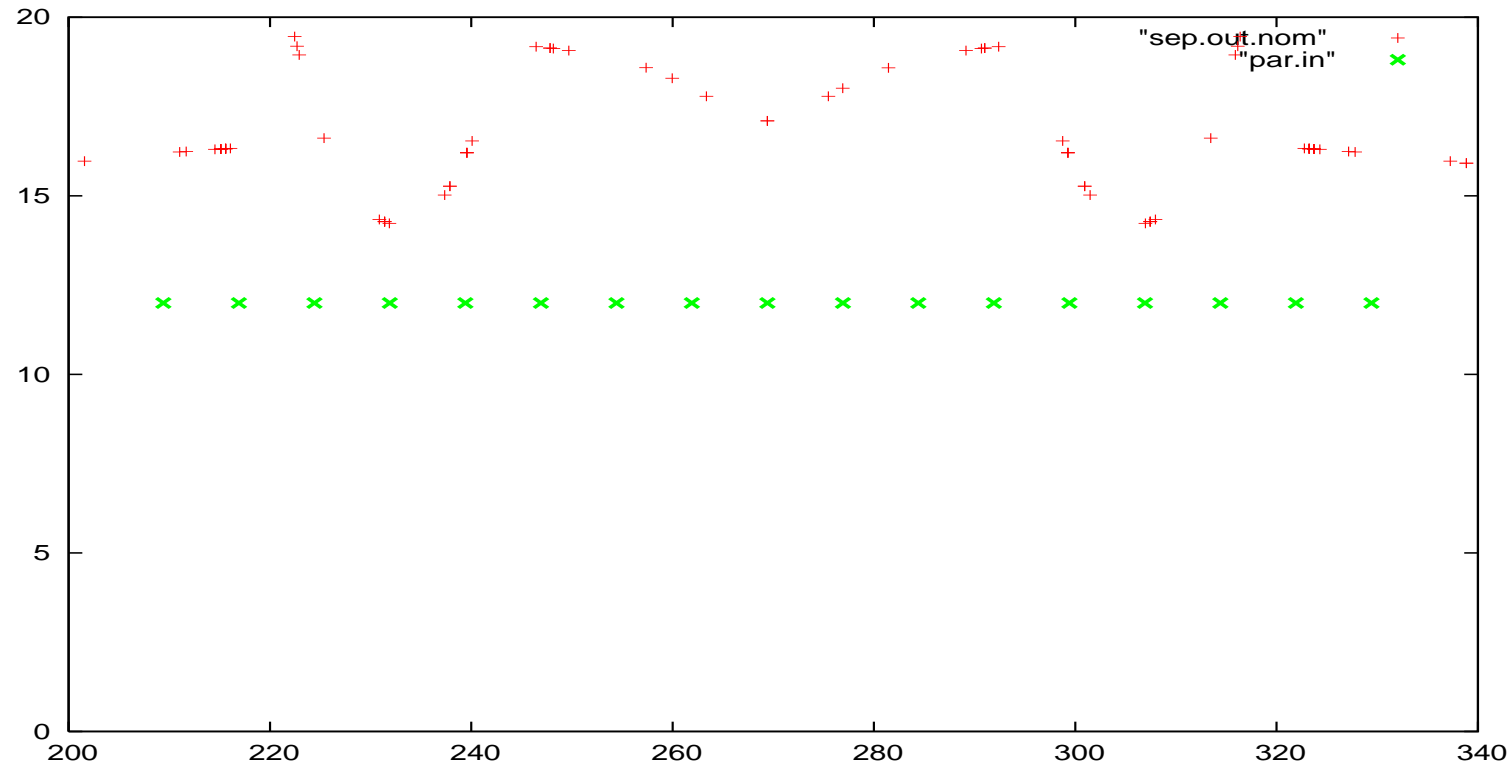
■ Parallel separation:

- $\Delta x = \pm 2.0$ mm at injection
- $\Delta x = \pm 0.7$ mm at 3.5 TeV

■ Changing sign with beam: going through zero angle



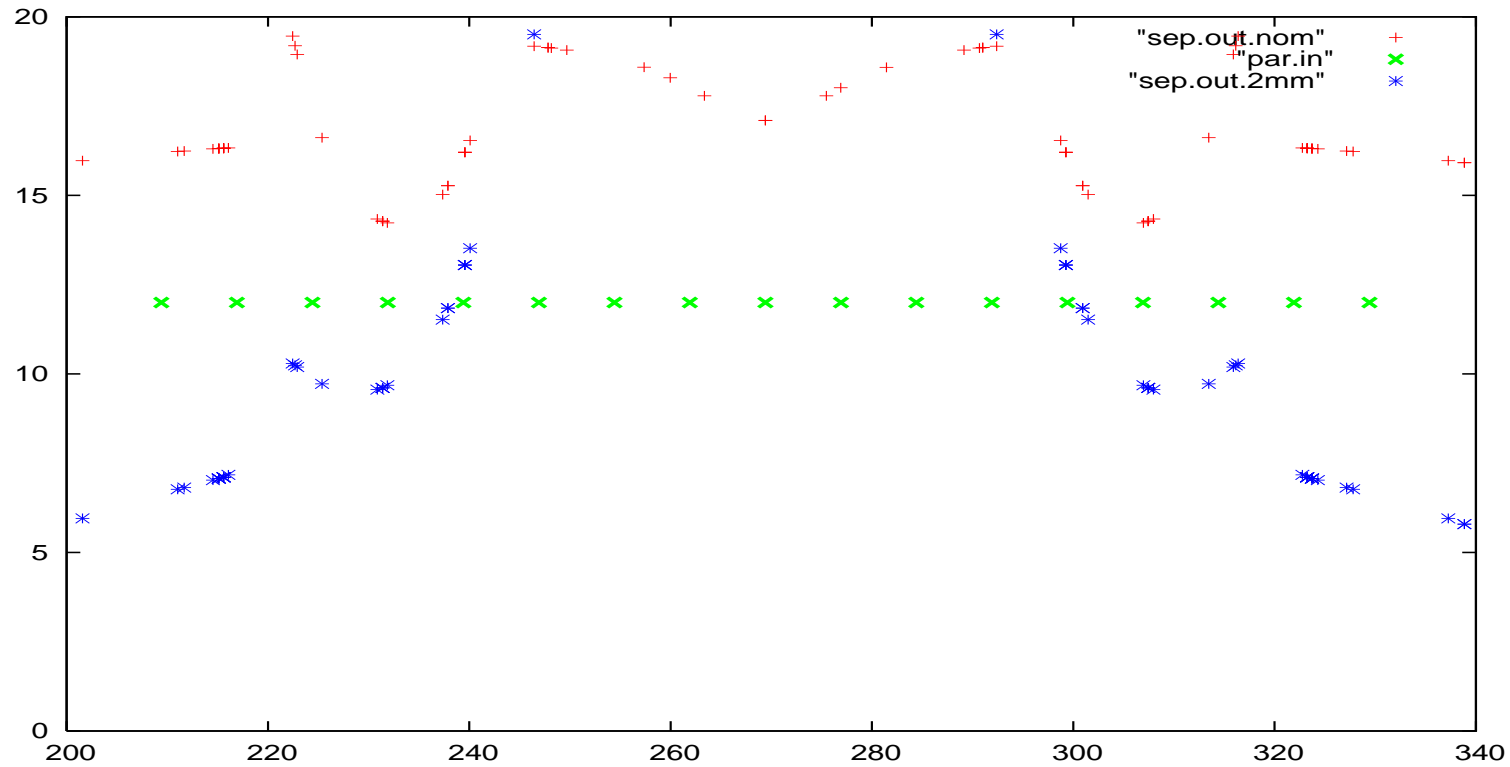
IP2 nominal



- Separation (normalized through IR, assuming $\epsilon_n = 2.5 \mu\text{m}$)
- Parallel separation and crossing angle



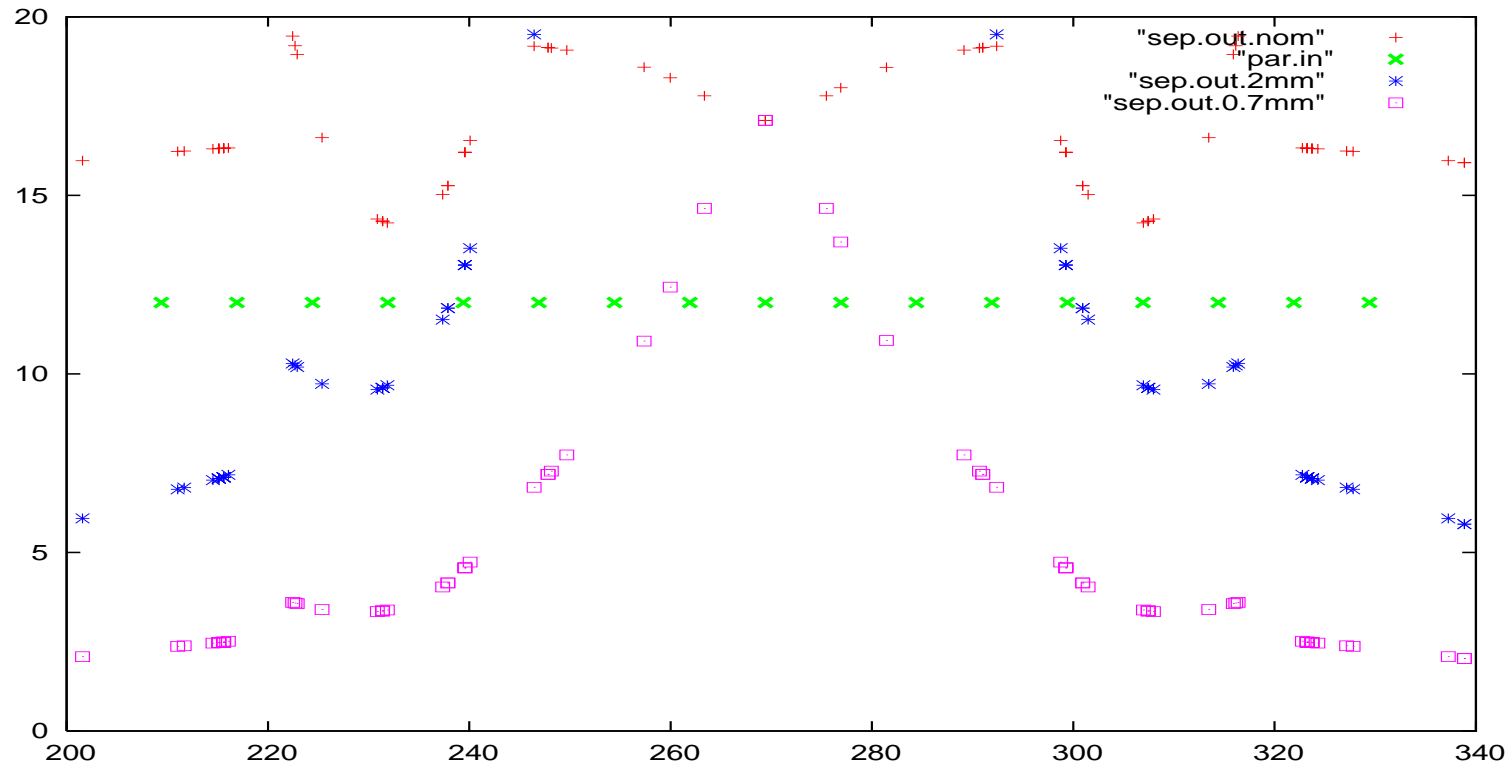
IP2 no external angle



➤ Parallel separation only ($\Delta x = \pm 2.0$ mm)



IP2 no external angle



➤ Parallel separation only ($\Delta x = \pm 0.7$ mm)

