Observable	Description
IP	Distance in 3D (impact parameter) between a track and a vertex, evaluated at the point of closest approach in 3D between the track helix and the vertex.
IP Significance	Impact parameter significance, $\mathrm{IP}/\sigma(\mathrm{IP})$, with uncertainty $\sigma(\mathrm{IP})$ computed by propagating the covariance matrices of the track and the vertex.
IPxy	Distance in the transverse plane (transverse impact parameter) between a track and a vertex, evaluated at the point of closest approach in 3D between the track helix and the vertex.
IPxy Significance	Transverse impact parameter significance, $\mathrm{IPxy}/\sigma(\mathrm{IPxy})$, with uncertainty $\sigma(\mathrm{IPxy})$ computed by propagating the covariance matrices of the track and the vertex.
IPz	Distance along the z-axis (longitudinal impact parameter) between a track and the PV, evaluated at the point of closest approach in 3D between the track helix and the PV.
IPz Significance	Transverse impact parameter significance, $\mathrm{IPz}/\sigma(\mathrm{IPz})$, with uncertainty $\sigma(\mathrm{IPz})$ computed by propagating the covariance matrices of the track and the vertex.