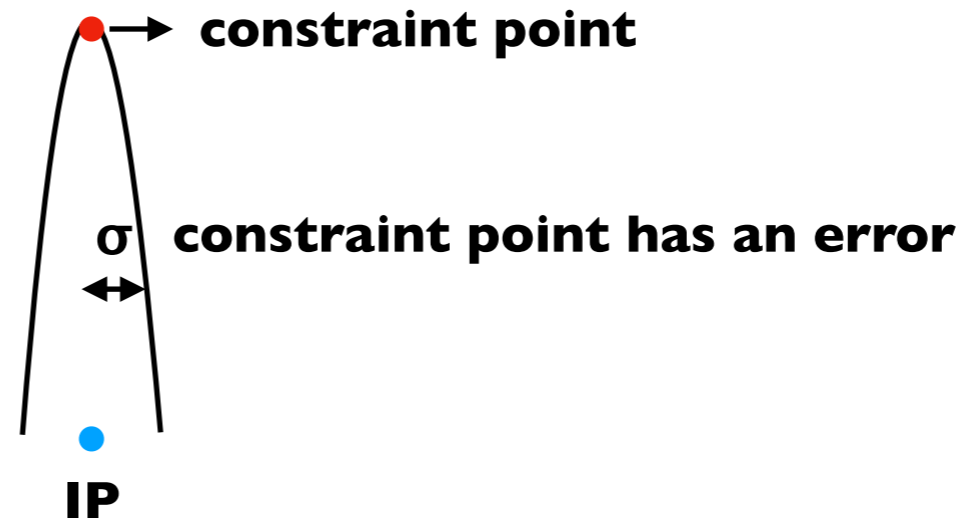


“Constraint” on primary vertex finding



The constraint point has an error, which is defined $\sigma=(639\text{nm},5.7\text{nm},91.3\mu\text{m})$ by default. This σ can be set in a steering file. In the primary vertex fitting, this point is used as an additional fitting point.

In DBD sample, IP is fixed at $(0,0,0)$. Instead, the constraint point is distributed around $(0,0,0)$ with a gaussian with the same σ .

In recent sample, IP is smeared with $(0,0,196.8\mu\text{m})$, and the constraint point is fixed at $(0,0,0)$, but still with the error defined as above σ . This corresponds to “with constraint and without smearing” in LCFIPlus.