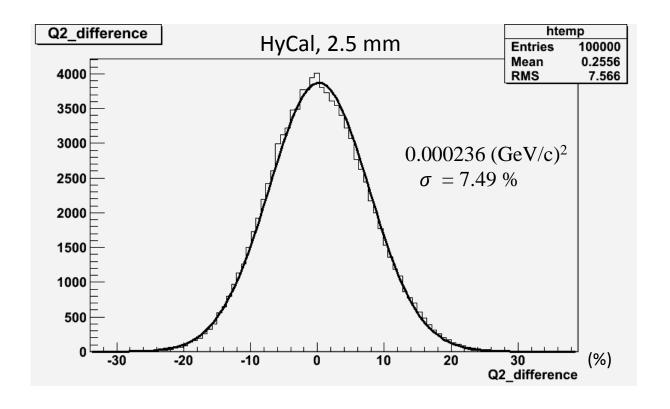
## Q<sup>2</sup> resolution

- Beam energy 1.1 GeV
- Scattered angle 0.8 degree
- Target position uncertainty included (Gaussian distribution as an approximation)
- Energy resolution 2.6%/ $\sqrt{E}$
- Position resolution, HyCal 2.5 mm/ $\sqrt{E}$ , fiber tracker 0.6 mm or 0.3 mm



## Q<sup>2</sup> resolution

• The energy resolution is dominant when the position resolution is 0.3 mm

