

Status of Data Analysis for TRD2023BT

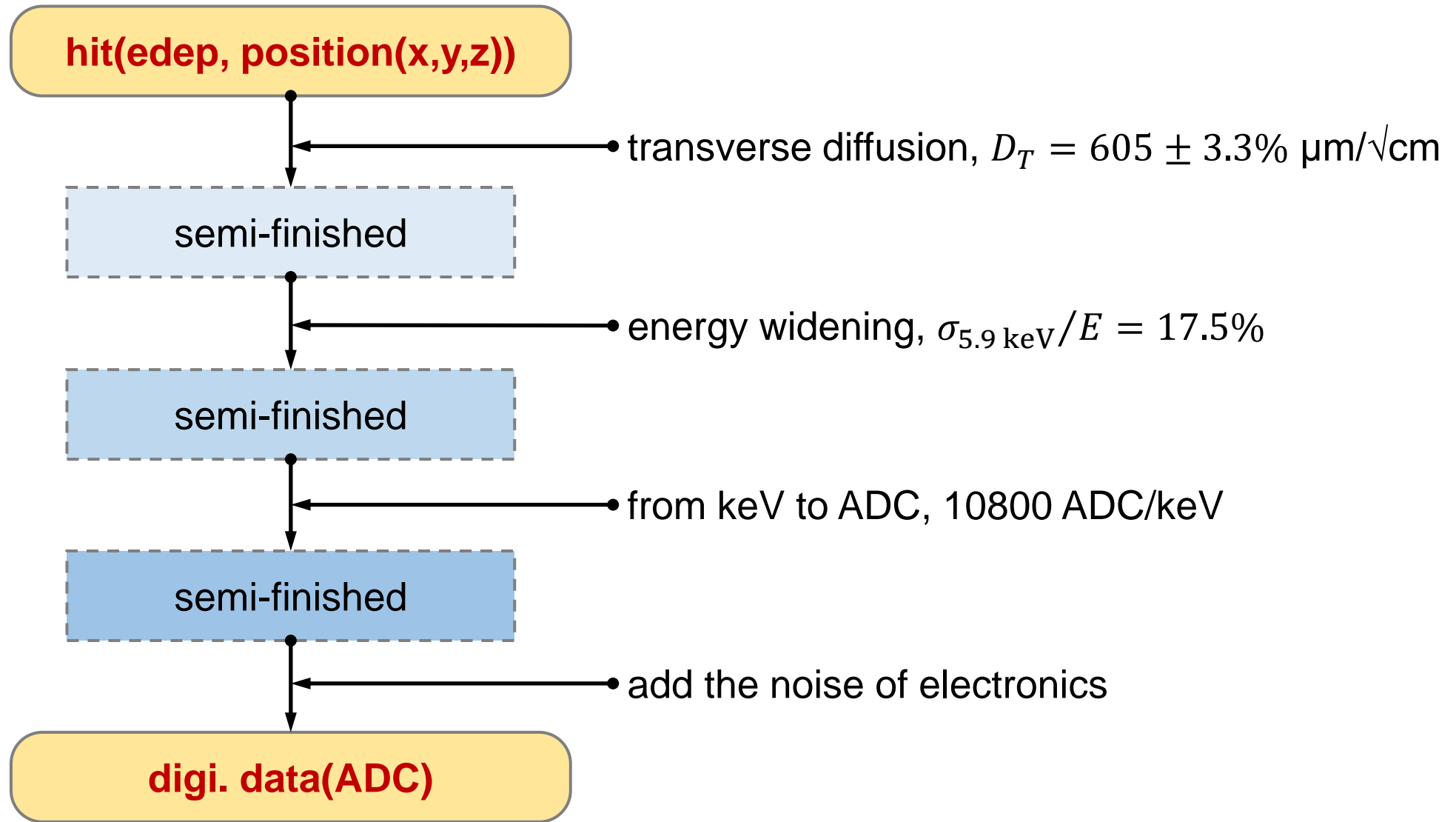
2023-11-14

Cong Dai

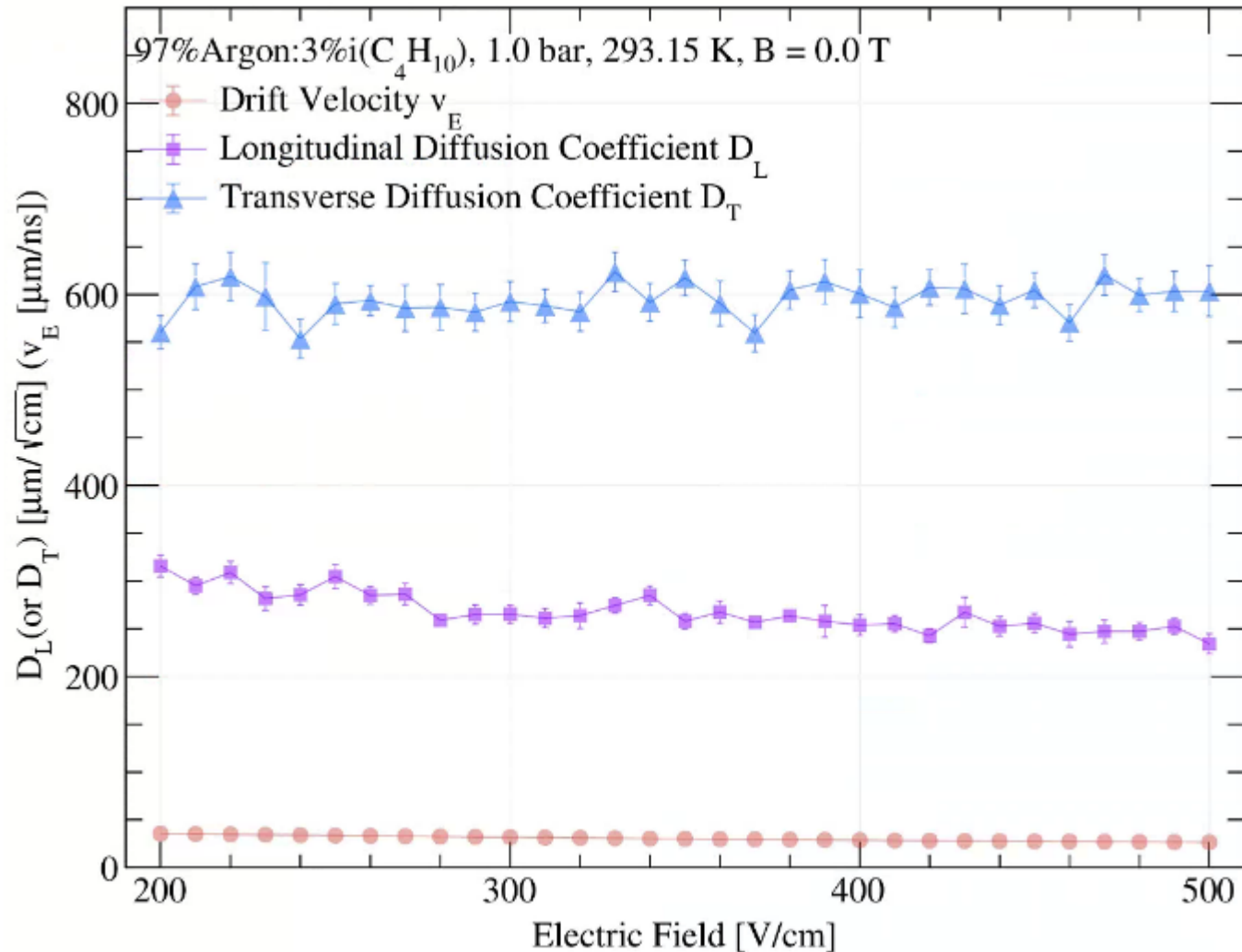
□ Purpose

- A. comparison of data and MC
- B. calculated the uncertainty

Digitization of MC data

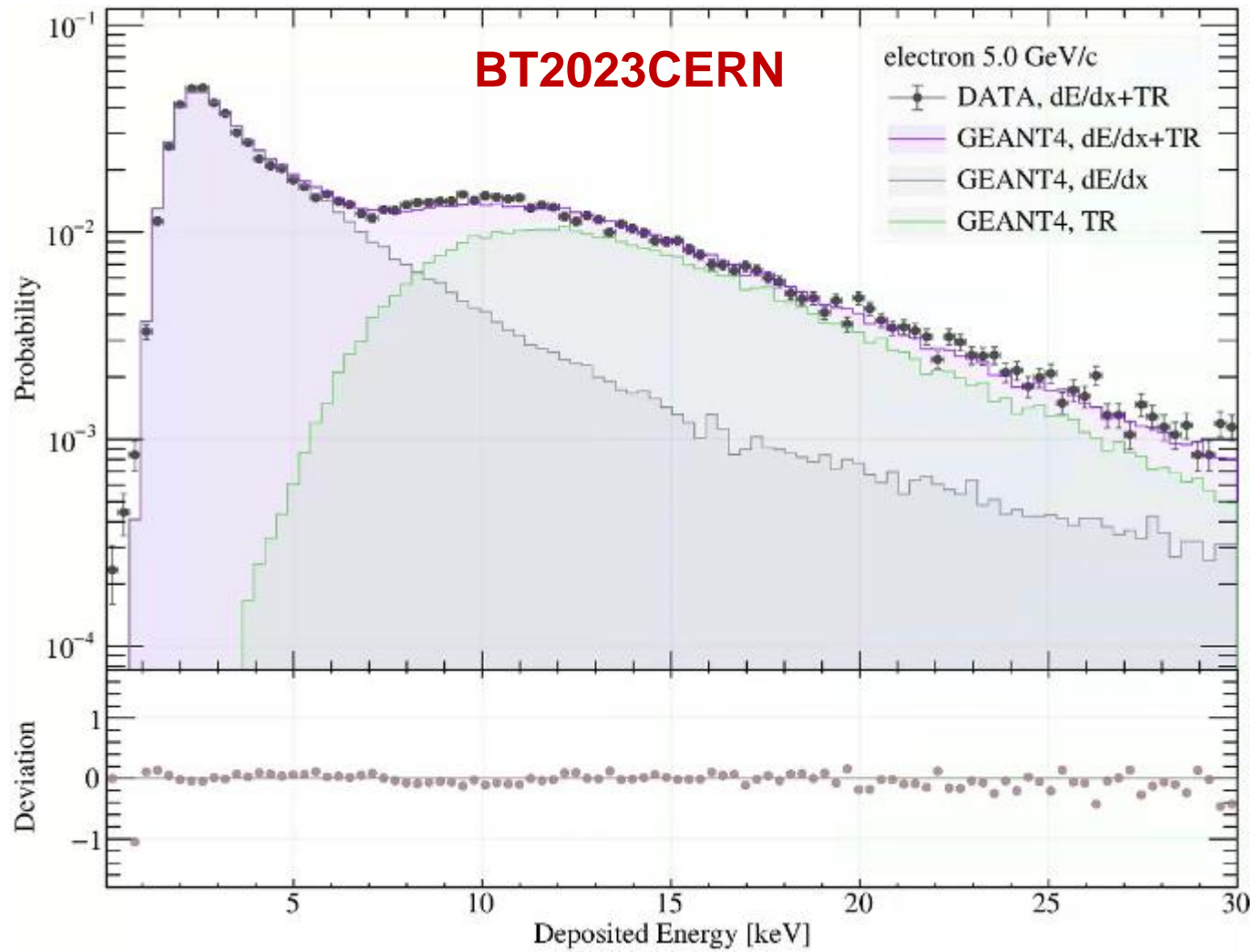


Transverse diffusion coefficient from Garfield++

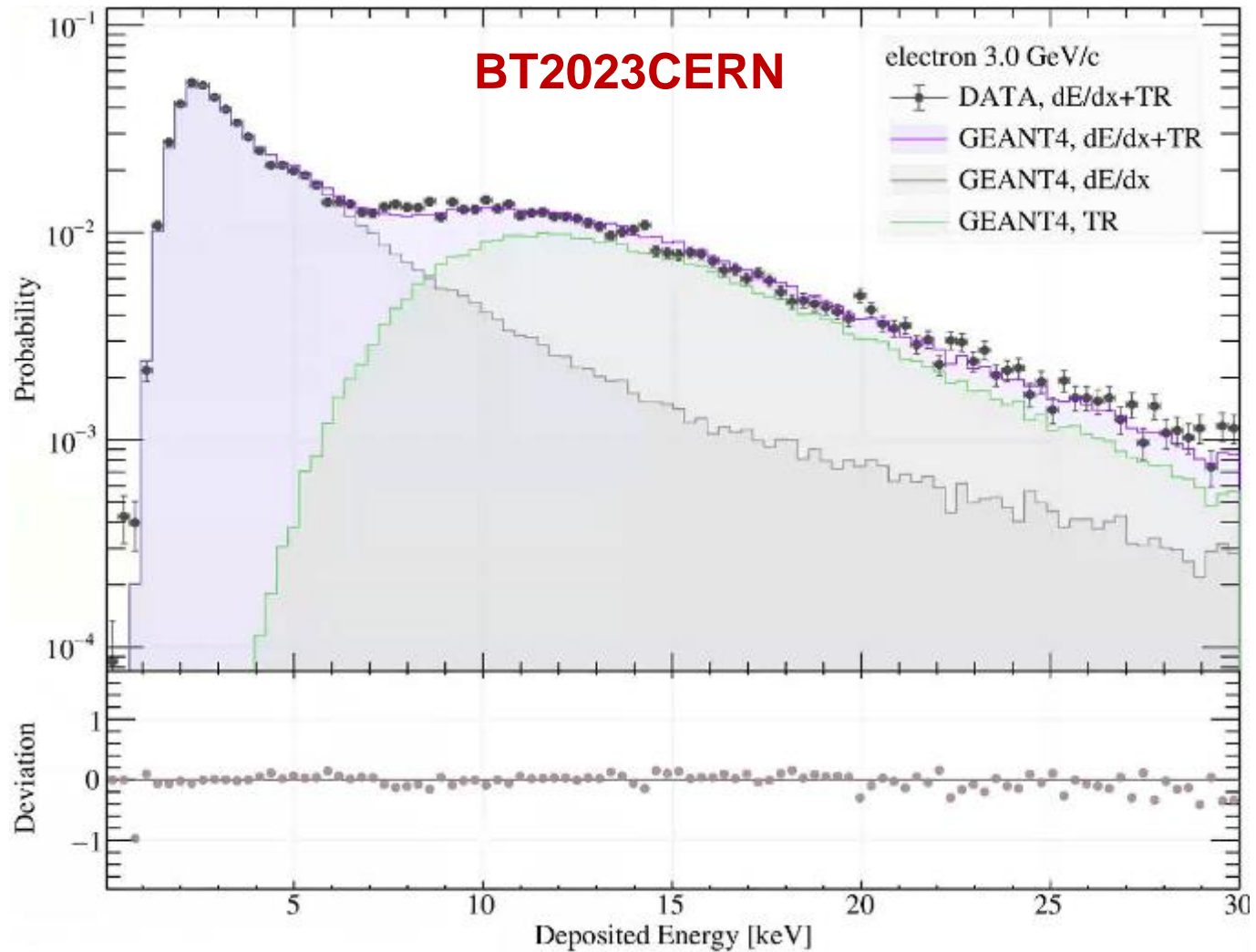


■ Ar/ C_4H_{10} (97%/3%), 1.0 bar, 380 V/cm, $605 \pm 3.3\% \mu\text{m}/\text{cm}^{1/2}$

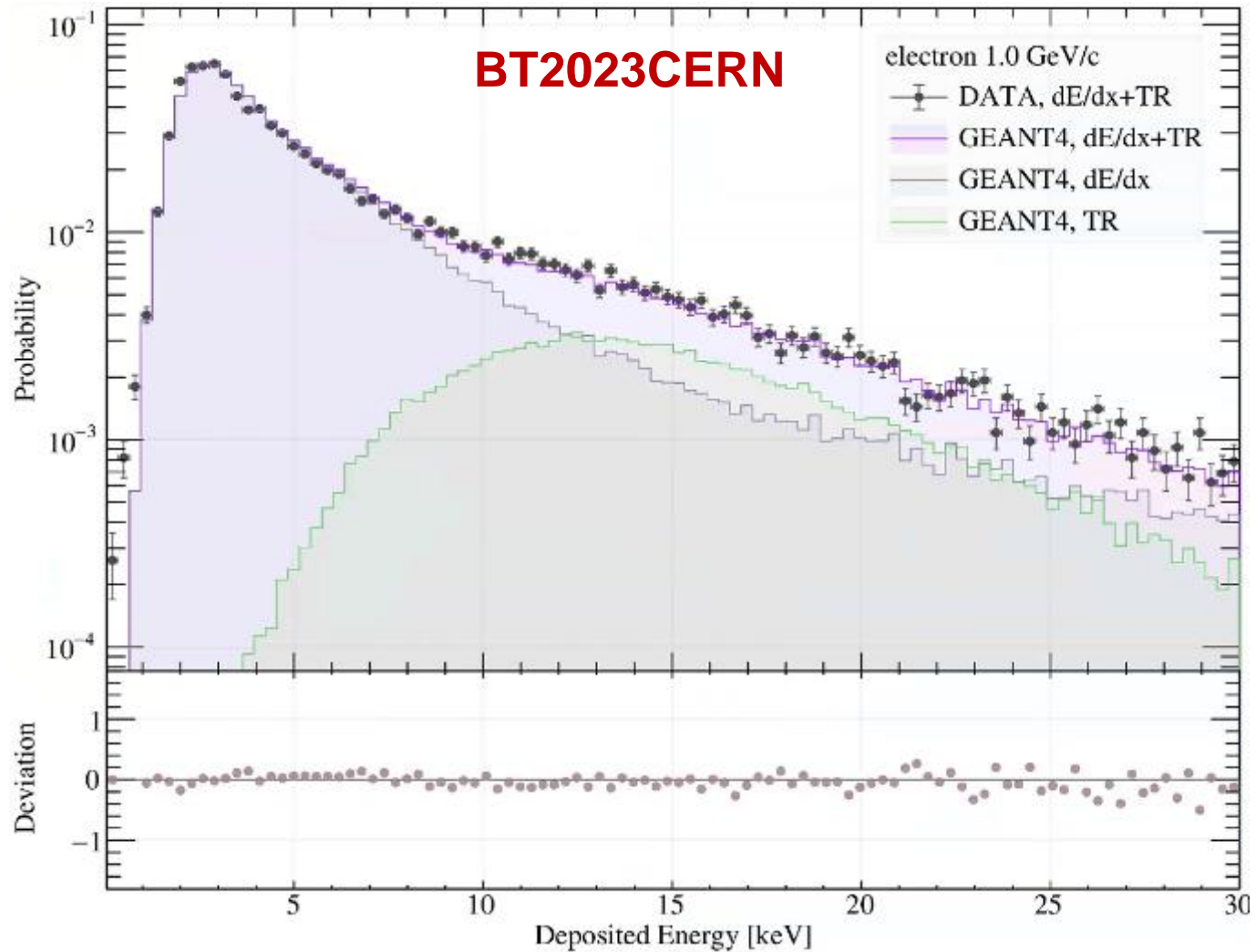
Comparison of simulation and measurement



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Three Gaussian Fitting Method

- ❑ some trouble of this method
 - ❑ unobviously for escape peak about 3 keV
 - ❑ fitted results strength relies on the initial value
 - ❑ (on-going) tested by MC data after digitization