

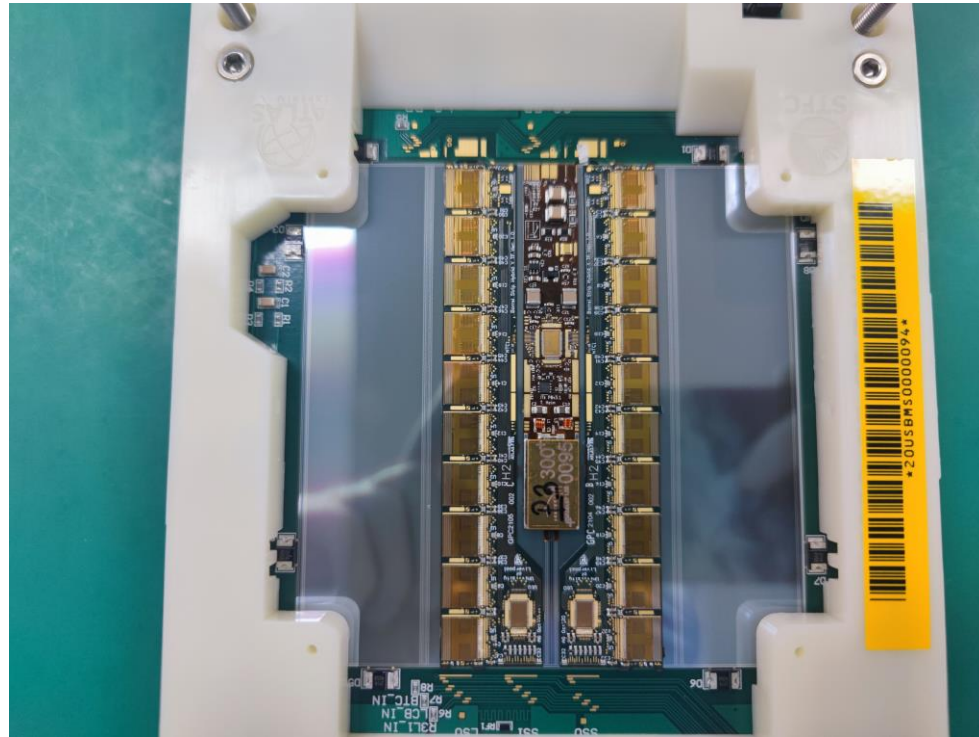
Weekly Report

Shudong WANG

ATLAS related tasks

- **Hardware**

- Accidentally damaged some bonding wires on an X-Hybrid when transferring it from the test panel to the assembly jig.
- Glued IHEP-PPA-SS1



CEPC related tasks

- **Top-coupling**

- Check the correctness of simulation:

- generate $e^- e^+ \rightarrow t \bar{t}$, ($t \rightarrow w^+ b$, $w^+ \rightarrow \text{up_type_q down_type_q}$), ($\bar{t} \rightarrow w^- \bar{b}$, $w^- \rightarrow \text{charged_lepton neutrino}$) QED<=99 QCD<=99

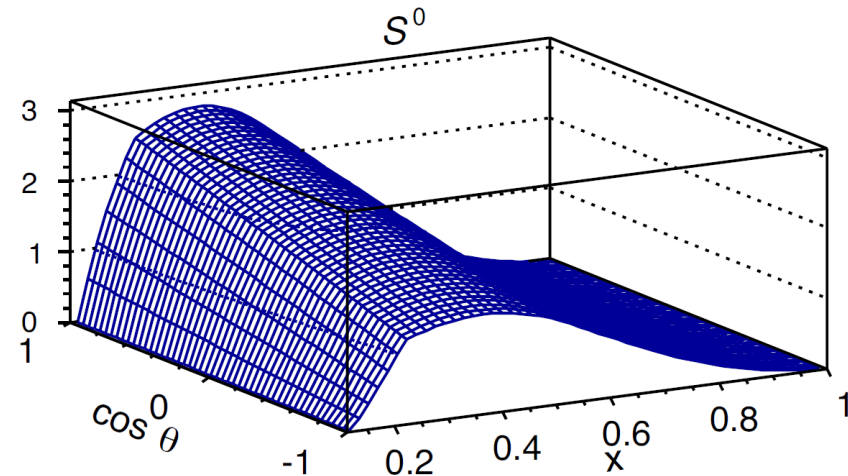
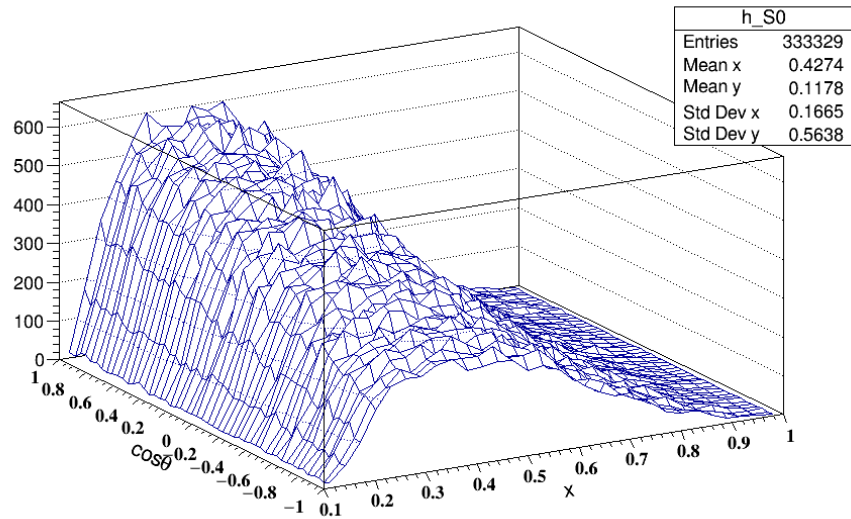


Figure in [1503.01325](#)

- θ is the lepton polar angle, and x is the reduced lepton energy, defined as $x = \frac{2E_l}{m_t} \sqrt{\frac{1-\beta}{1+\beta}}$, where β is the top velocity and m_t is the top mass