

# Workshop Goal

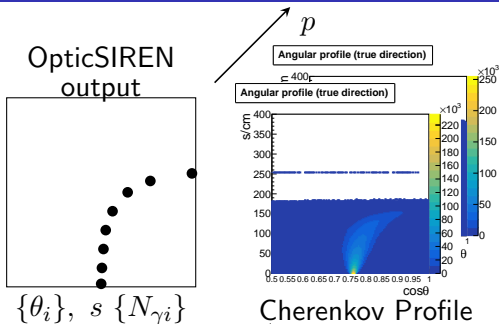
Tsuchii Ryotaro

Kuze Laboratory

CIDeR-ML workshop

July 30, 2024

# My study



- Developing the momentum reconstruction algorithm.

$$\mathcal{L}(p) = \prod_i \mathcal{L}_{\text{CP}}(p, \theta_i, s_i)$$

↓ Minimize  $-\ln \mathcal{L}$  by GDM

$p_{\text{best-fit}}$

# Workshop Target of Ryotaro

- First week:
  - By using toy-model fakedata, evaluate and improve reconstruction algorithm.  $\sim 2$  days.
  - Use new toy-model fakedata.  $\sim 3$  days.
    - Add randomness when generating fake data.
- Second week:
  - Develop PID algorithm for  $e, \mu, \pi$ . 4- days.
    - By calculating losses of each particles and comparing the losses and reconstructed momentum.

# Today

- Login the slac unix account.
  - I forgot how to login and use slac unix account.
  - I remember I forgot my password and tried to change this at the last workshop.
  - After this, what did I do.....?
- Check the changing of loss and momentum at steps.
- Check the loss threshold dependence of relative error and processing time.