

- **Analysis topic** (Write your topic)  
Chronological study of the MIP peak position using pp data
- **Current knowledge** (What you know)  
Radiation damage increases the bias voltage of Si sensors. As radiation damage larger, the position of the MIP peak should be lower due to changes in sensor performance.
- **status of this topic** (What you have)
  - I reproduced Genki's analysis and I found the MIP peak by applying a cut of the tracking  $\theta$  to the ADC distribution. Then I fitted it with using Landau function.
- **Goal for the workshop** (Your goal; Please write down with priority)
  1. Updating the fitting method by using a convolution function of Landau and Gaussian
  2. Determination of  $z_{\text{vtx}}$  with better precision
- **Milestones to reach to your goal**  
(Write down what you need to learn/study for reaching to your goal)
  1. Learn more about the fitting process and implement the new method
  2. Learn about z vertex analysis and collaborating with Mahiro for the implementation