

## CEPC Ref-TDR ECAL Updates

Yong Liu (IHEP) for the CEPC Ref-TDR ECAL team CEPC Reference Detector TDR Weekly Meeting February 18, 2025



## Overview on updates

- NDL-SiPM meeting for CEPC crystal ECAL:
  - Feb. 12, 2025: <u>https://indico.ihep.ac.cn/event/25036/</u>
- Visit SIC-CAS in Feb. 12: discussion on preparations for cost-estimate review
- (Remote) Meeting in Feb. 13 with Prof. R. Zhu on ECAL
- CEPC Ref-TDR ECAL Weekly Meeting
  - Feb. 14, 2025: <u>https://indico.ihep.ac.cn/event/25007/</u>



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- CEPC Ref-TDR ECAL Weekly Meeting: <u>agenda</u> (Feb. 14, 2025)
- Summary of talks and discussions
  - NDL-SiPM: testing results and technical ways to increase SiPM pulse width (<u>talk</u>)
    - To address the issue to SiPM-readout ASIC due to discrete "spikes" in BGO-SiPM
    - Identified a few more items for further testing in lab: to be done within this week
  - SiPM quality control standards and requirements: exchanged info with NDL team
  - SIC-CAS visit: BGO/BSO crystal growth updates, impacts of crystal length to cost
  - SiPM-readout ASIC: discussions with electronics team on ASIC design specs
  - Updated simulation of SiPM+BGO pulse including Beam-Induced Backgrounds (<u>talk</u>)



## Extra update

- <u>VCI2025</u> this week (Feb. 17-21)
  - Oral talk on CEPC crystal calorimeter R&D highlights
  - (Though a bit digressed from Ref-TDR) Plenary talk on "<u>Mechanics for particle</u> <u>detectors</u>" by Corrado Gargiulo: top quality and very inspiring for future CEPC R&D activities beyond Ref-TDR (please be noted about ~1GB slides)

