



Contribution ID: 109

Type: Oral presentation using Zoom

Physics potential and technologies for ”five-dimensional particle imaging device”

Wednesday, 27 October 2021 19:24 (24 minutes)

Picosecond timing measurements have become to one of the hottest topic in the detector development. We are considering to utilize the latest timing measurement technologies to combine with our ILD concept, including application of LGADs to silicon-tungsten ECAL and 100ps-level timing measurements at scintillator calorimeters. The updated detector can be called as “5D particle imaging device” showing combination of high granular detector elements and picosecond timing resolution. We would like to discuss possible detector design and challenges of the updated concept as well as possible physics impact of adding the new dimension to the detector.

1st preferred time slot for your oral presentation

15:30-17:30 JST (8:30-10:30 CEST, 2:30-4:30 EDT, 23:30-1:30 PDT)

2nd preferred time slot for your oral presentation

19:00-21:00 JST (12:00-14:00 CEST, 6:00-8:00 EDT, 3:00-5:00 PDT)

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Session Classification: D-2: New technologies & ideas for collider detectors

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