ILC Workshop on Potential Experiments

Contribution ID: 323

Type: Oral presentation using Zoom

The Deep Junction LGAD: A New Approach to High-Granularity 4D Tracking

Wednesday, 27 October 2021 13:48 (24 minutes)

Conventional LGADs, of the type to be used in the timing layers of the upgraded ATLAS and CMS detectors, are unable to provide granularity finer than the millimeter scale. As a result, a number of refined approaches are under development to overcome limiting junction termination requirements and allow for granularity at the 100 um scale or finer. One such approach, the Deep Junction LGAD, will be presented here, including both the conceptual and practical aspects of its design, as well as the status of R&D towards production of the first prototypes.

1st preferred time slot for your oral presentation

10:00-12:00 JST (3:00-5:00 CEST, 21:00-23:00 EDT, 18:00-20:00 PDT)

2nd preferred time slot for your oral presentation

13:00-15:00 JST (6:00-8:00 CEST, 0:00-2:00 EDT, 21:00-23:00 PDT)

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Session Classification: D-1: New technologies & ideas for collider detectors

Track Classification: Parallel sessions: Detectors: Session D: New technologies & ideas for collider detectors