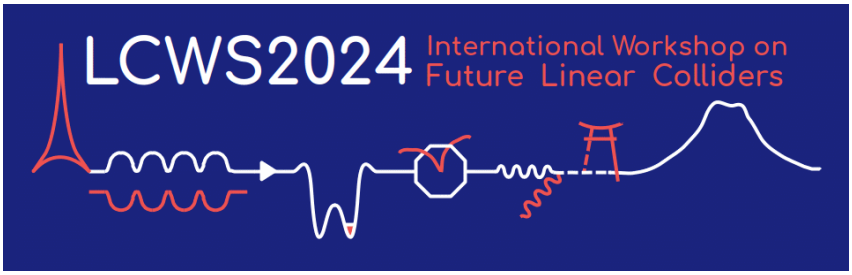

Contribution ID: **216** Type: **Oral presentation (remote)**

Photon and Electron Reconstruction in an Ultra-High Granularity Luminosity Calorimeter

Wednesday 10 July 2024 10:00 (30 minutes)

Our recent work has shown that a novel, ultra-high granularity, forward calorimetry concept can enable much more detailed and precise reconstruction than the compact baseline designs based on LEP luminometers, together with the capability of electron/positron/photon separation.
In this contribution we will highlight the significantly more precise measurements of photon four-vectors using both much better sampling for high performance energy resolution ($4\%/\sqrt{E}$) and the use of the energy deposition around the initial photon conversion point rather than the traditional shower center-of-gravity based estimates. We will also include related results on shower fitting.

Apply for poster award

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Session Classification: Calorimetry, Muon detectors

Track Classification: Physics and Detector: Calorimetry, Muon