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Simulation study on energy and position resolutions with 4pi dual-readout calorimeter KYUYEONG HWANG, Yonsei University, BOBAE KIM, JUNGHYUN LEE, SEHWOOK LEE, Kyungpook National University, SANGHYUN KO, Seoul National University, DOYOUNG KIM, JASON LEE, YUNJAE LEE, JONGSUK PARK, MINSANG RYU, IAN WATSON, University of Seoul, YUN EO, SEUNGKYU HA, KYUNGHO KIM, MINSOO KIM, SUNGWON KIM, JUNEWO PARK, HWIDONG YOO, Yonsei University — The dual-readout calorimeter(DRC), which is one of the candidates for the FCC-ee and CEPC projects, is composed with two different types of fibers: scintillating and Cerenkov fibers. They offer high-quality energy resolution by compensating hadron shower energy based on its electromagnetic shower fraction. The DRC modules, packed with dense arrays of fibers, compose projective structure. This high-precision and high-granularity design allows good separation for the position and angular distributions in an efficient way. This presentation will discuss the energy resolution of the electromagnetic and hadronic particles (including jets) and the position and angular resolutions in the basis of the simulation carried out using GEANT4.

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