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Type: Oral presentation using Zoom

A dual-readout electromagnetic calorimeter for future e⁺e⁻ Higgs factories

Wednesday, 27 October 2021 13:00 (24 minutes)

In the past, homogeneous electromagnetic calorimeters have allowed precision measurements of electrons and photons, while high-granularity, dual-readout, and compensating calorimeters have been considered promising paths for improving hadronic measurements. In this talk, the possibility of using a homogeneous high-granularity crystal electromagnetic calorimeter using SiPMs with a spaghetti hadronic calorimeter using clear and scintillating fibers is explored using simulation. By employing wavelength and timing measurements in both calorimeters, the excellent electromagnetic resolution typical of crystal calorimeters is preserved, and the excellent hadronic resolutions are enabled for important physics measurements at future Higgs factories. We also discuss past studies and future plans.

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)

Primary author: ZHU, Junjie (University of Michigan (US))

Co-authors: BELLONI, Alberto (University of Maryland); AKCHURIN, Nural (Texas Tech University); CHEKANOV, Sergei (Argonne National Laboratory); DEMARTEAU, Marcel (Oak Ridge National Laboratory); ENO, Sarah (U. Maryland); ZHOU, Bing (University of Michigan); NEWMAN, Harvey; MAGILL, Stephen Robert (Argonne National Laboratory (US)); KUNORI, Shuichi (Texas Tech University); JUNG, Andreas (Purdue University); QIAN, Jianming (University of Michigan); TULLY, Christopher (Princeton University); HIRSCHAUER, James (Fermi National Accelerator Laboratory); HARRIS, Philip (MIT); FREEMAN, James (Fermi National Accelerator Laboratory); WENZEL, Hans (FNAL); HIROSKY, Bob (University of Virginia (US)); ZHU, Ren-Yuan (California Institute of Technology (CALTECH))

Presenter: ZHU, Junjie (University of Michigan (US))

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