

# Overview of the Electromagnetic Calorimeter Trigger System at the Belle II Experiment

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The Belle II at the SuperKEKB collider in Japan has been constructed toward a physics run in early of 2018 with an ultimate target of 40 times higher instantaneous luminosity than the KEKB collider, which was  $2.1 \times 10^{34}/\text{cm}^2\text{s}$ .

The main physics motivation is to search for the New Physics from heavy quark/lepton flavor decays.

We have upgraded the Electromagnetic Calorimeter(ECL) hardware trigger system in order to select an event of interest efficiently under much higher luminosity and beam background environment than the KEKB.

ECL trigger logic based on two main triggers, the total energy and the number of clusters, would be improved with an FPGA-based flexible architecture and a high speed serial link for the data transfer.

In this report, progress of the ECL trigger system development will be outlined and preliminary results from beam collision data in Phase II run will be described.

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