

## **Primary processing of hits in cylindrical GEM tracker of the BESIII experiment**

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The inner part of the BESIII drift chamber is expected to be replaced with a cylindrical GEM (CGEM) tracker in summer 2019. Despite providing generally similar performance to the currently installed inner drift chamber, it may improve tracking of the low-momentum charged particles, which is strongly affected by the beam-induced background. Moreover, it can be seen as testing ground for trackers in proposed high event rate experiments like super  $c$ -tau factories. For high background and high multiplicity events application of advanced neural network track reconstruction methods may provide gains both in tracking efficiency and reconstruction time. In this talk the very first step, namely primary event processing for the BESIII CGEM subdetector which involves cluster finding and 3d-coordinate hit reconstruction, will be considered.

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