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Measurement of the Structure of the Inner Tracking Detector of the CMS Experiment Using Nuclear Interactions[1] EILISH GIBSON, Univ of Kansas, CMS COLLABORATION COLLABORATION — In order to improve detector simulations and identify any changes in the positions of the inactive elements, it is important to measure the location of material in the inner tracker system of the CMS detector at the LHC. Precise position measurements of the beam pipe, pixel shield, pixel support, and pixel support rails were made using secondary vertices that are reconstructed from hadronic interactions with nuclei in the detector material. The measurements used data from proton-proton collisions at a center-of-mass energy of 13 TeV recorded in 2015.

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Eilish Gibson
Univ of Kansas

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