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## **A measurement of the position resolution of RD53A modules using the SLAC testbeam**

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Position resolution is a key property of the innermost layer of the upgraded ATLAS and CMS pixel detectors for determining track reconstruction and flavor tagging performance. The 11 GeV electron beam at the SLAC End Station A was used to measure the position resolution of RD53A modules with a  $50 \times 50$  and  $25 \times 100 \mu\text{m}^2$  pitch. Tracks are reconstructed from hits on telescope planes using the EUTelescope package. The position resolution is extracted by comparing the extrapolated track and the hit position on the RD53A modules, correcting for the tracking resolution.  $12.0$  and  $7.3 \mu\text{m}$  resolution can be achieved for the  $50$  and  $25 \mu\text{m}$  directions, respectively, with a  $13$  degree tilt. This result provides important information for deciding between the two geometries for the upgraded pixel detectors.

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