

Concept of a Tilted Barrel for the CMS Tracker Phase 2 Upgrade

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A novel detector design with tilted silicon strip/pixel detector modules is being considered for the Inner Barrel section of the CMS Tracker Phase 2 Upgrade. By tilting the modules towards the interaction point the angular coverage of the modules is increased, leading to less modules needed. The layout and a support structure concept for such tilted geometry are presented.

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