

7th Beam Telescopes and Test Beams Workshop



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A telescope based on MALTA CMOS sensors

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MALTA is a novel monolithic active pixel CMOS sensor chip designed in TowerJazz 180nm imaging technology for the phase II upgrade of the ATLAS Inner Tracker (ITk) detector. A MALTA telescope has been developed with 6 planes. In this contribution we will review the performance of the telescope in terms of spacial resolution and timing and will be compared with simulations. The results show that the new MALTA based telescope is a capable system for characterisation with a preliminary resolution of $4\ \mu\text{m}$ achieved.

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