MALTA CMOS sensor telescope: experience from the operation and recent measurements

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MALTA is a novel monolithic active pixel CMOS sensor chip designed in TowerJazz 180nm technology. The chip contains 512x512 square pixels with a pitch size of 36.4 μm, and has a thickness down to 100 μm. A MALTA telescope has been developed that contains 3-6 planes. In this contribution we will review the performance of the telescope evaluated during recent testbeam campaigns at DESY and ELSA. The results show that the MALTA-based telescope is capable to characterise new devices with good spatial resolution at high event rates. The measurements of new sensor types with improved radiation-hardness will be also outlined.

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