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Study of prototypes of LFoundry active and monolithic CMOS pixels sensors for the ATLAS detector

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High Energy Particle Physics experiments at the LHC use hybrid silicon detectors, in both pixel and strip geometry, for their inner trackers. These detectors have proven to be very reliable and performant. Nevertheless, there is great interest in the development of depleted CMOS silicon detectors, which could achieve similar performances at lower cost of production and complexity. We present recent developments of this technology in the framework of the ATLAS CMOS demonstrator project. In particular, studies of two active sensors from LFoundry, CCPD_LF and LFCPIX, and the first fully monolithic prototype MONOPIX will be shown

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