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## Development of a SiPM based camera for Cherenkov Telescope Array

The Italian Institute of Nuclear Physics (INFN) is involved in the development of a prototype for a SiPM-based camera for the Cherenkov Telescope Array (CTA), a new generation of telescopes for ground-based gamma ray astronomy. In this framework, an R&D program within the 'Progetto Premiale Telescopi Cherenkov made in Italy (TECHE.it)' for the development of SiPMs suitable for Cherenkov light detection (Near - Ultraviolet SiPMs) has been carried out. The developed device is a High Density NUV-SiPM based on a micro cell of  $30\ \mu\text{m} \times 30\ \mu\text{m}$  and  $6\ \text{mm} \times 6\ \text{mm}$  area produced by Fondazione Bruno Kessler (FBK). A full characterisation of the single SiPM will be presented and compared with the old technology (NUV-SiPM) and with other SiPMs commercially available. The NUV-HD SiPM will be tested in the pSCT (Schwarzschild-Couder Telescope prototype) for CTA which is leading to a camera concept based on  $8 \times 8$  NUV-HD SiPM module as detecting unit. An update on recent tests on the detectors arranged in this matrix configuration and on the front-end electronics will be given.

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