

NEWSLETTER 72

Istituto Nazionale di Fisica Nucleare

JUNE 2020



INTERNATIONAL PROJECTS

CRAB NEBULA OBSERVED BY THE FIRST TELESCOPES OF THE FUTURE CTA PROJECTS

Two successes for the new telescopes of the next generation CTA (Cherenkov Telescope Array) observatory, made possible by the technological solutions developed in particular by INFN and INAF, National Institute for Astrophysics. The pSCT telescope, a prototype of a Schwarzschild-Couder type telescope at the

VERITAS (Very Energetic Radiation Imaging Telescope Array System) observatory in Arizona, USA, recorded its first gamma-ray signal from the Crab Nebula during the observation campaign conducted between January and February this year. This result is crucial for the prospects of the SCT project and for the CTA observatory in general. Another crucial result is the detection, a few days later, of the weak pulsed emission of gamma photons, again from the Crab Nebula, by LST-1, the first of four large Cherenkov telescopes (23m in diameter) which, together with a dozen or so medium-sized telescopes (12m), will comprise the array of detectors at the northern CTA site in the Canary Islands. Two results that mark the success of the technology used and demonstrate the great potential of the future observatory.