

Lundi 4 Avril, 11h00

CEA-Saclay Bât. 141, salle André Berthelot

Optimization of the Cherenkov Telescope Array performances with NectarCAM

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SPP, DESY

The Cherenkov Telescope Array (CTA) is the next-generation ground-based facility for very-high-energy gamma-ray observations in the energy range from some ten GeV to a few hundred TeV. CTA will comprise two arrays with about 100 and 20 Cherenkov telescopes in the southern and northern hemisphere, respectively. The telescope imaging cameras will be equipped with 1000-10000 photo-sensors (pixels). CTA will possess about a ten times better sensitivity compared to the currently operating Cherenkov Telescope facilities like H.E.S.S., MAGIC and VERITAS. This will boost the understanding of the VHE astrophysical phenomena. In this talk, we illustrate the CTA capabilities for the study of pulsars and young supernova remnants. The CTA performance is assessed by means of end-to-end Monte-Carlo simulations which address key questions such as the choice of the best camera trigger algorithm and the optimal design of the readout system. One of the CTA camera designs, the NectarCAM camera together with its characterization at the IRFU integration site will be discussed in greater detail.

Le café sera servi 10 minutes avant.

NB : La présentation d'une pièce d'identité est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance Martine Oger, tél. 01 69 08 23 50, e-mail : martine.oger@cea.fr. (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).