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LATTES: a new detector concept for a gamma-ray experiment in the Southern hemisphere

The Large Array Telescope for Tracking Energetic Sources (LATTES), is a novel concept for a hybrid EAS array detector, composed of a Resistive Plate Counter and a Water Cherenkov Detector, planned to cover gamma-rays from less than 100 GeV up to 100 TeVs. This experiment, to be installed at high altitude in South America, could cover the existing gap in sensitivity between satellite and ground arrays.

The low energy threshold, large duty cycle and wide field of view of LATTES makes it a powerful tool to detect transient phenomena and perform long term observations of variable sources. Moreover, given its characteristics, it would be fully complementary to the planned Cherenkov Telescope Array (CTA) as it would be able to issue alerts.

In this talk, a description of its main features and capabilities, as well as results on its expected performance, and sensitivity, will be presented.

Subject

Astro/Cosmo

Abstract Title

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Author's e-mail

ruben@lip.pt

Author's Name

Ruben Conceição

Author's Institute

LIP

Primary author: DA SILVA CONCEICAO, Ruben Mauricio (LIP Laboratorio de Instrumentacao e Fisica Experimental de Part)

Presenter: DA SILVA CONCEICAO, Ruben Mauricio (LIP Laboratorio de Instrumentacao e Fisica Experimental de Part)

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