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Monitoring the energetic Universe with the ALTO gamma-ray observatory (12'+3')

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Imaging Atmospheric Cherenkov Telescopes together with the Fermi-LAT satellite have, in the last 15 years, unveiled how rich the Universe is in powerful mechanisms able to accelerate particles which then produce High Energy (HE) and Very High Energy (VHE) gamma-rays. Some of the gamma-ray emitting sources are found to be steady with respect to the sensitivity of the instruments, while many of them are found to be variable, and can be seen only when they are in a flaring state. In order to catch flaring gamma-ray sources with $E > 300$ GeV, we propose the construction of ALTO, a wide-field of view gamma-ray observatory, which we aim to install in the Southern hemisphere at an altitude of about 5 km. I will present the status of the project, including the prototyping efforts.

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