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Detecting Antiprotons with Submicrometric Spatial Accuracy

Thursday, 5 February 2026 14:00 (15 minutes)

The AEgIS experiment aims to measure the free fall of antihydrogen in Earth's gravitational field with unprecedented precision. This requires overcoming unique technological challenges, among them the detection of antiprotons, in real-time with the highmost spatial accuracy, over a large area. An unexpected, but very effective solution to this problem was obtained through the repurposing of smartphone camera sensors. In this talk, the characterization and the engineering and deployment of OPHANIM, a 3.84 Gigapixel, large area detector based on their use, will be discussed.

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