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AEGIS at CERN: Measuring Antihydrogen Fall

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AEGIS (Antimatter Experiment: Gravity, Interferometry, Spectroscopy) is an experiment at the CERN Antiproton Decelerator to study antimatter. The main goal of the AEGIS experimental programme is the test of fundamental laws such as the Weak Equivalence Principle (WEP) and CPT symmetry. In the first phase of AEGIS, a beam of antihydrogen will be formed whose fall in the gravitational field will be measured in a Moiré' deflectometer; this will constitute the first test of the WEP with antimatter.

References

- [1] A. Kellerbauer et al. (AEGIS Collaboration), Nucl. Instrum. & Methods B, 266, 351 (2008).
- [2] R. Ferragut et al. (AEGIS Collaboration), Canadian J. of Physics, 89, 17 (2011).

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