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Effect of Gravity on Quasi-bound States of Antihydrogen. NATHAN FLOYD, Univ of North Texas — An initially unbounded positron within the electric field of an antiproton can be simulated to form quasi-bound states adiabatically. The effect of gravity on quasi-bound states of antihydrogen are simulated to show the changes of motion of the two particles. An analytical model is developed, and results appear to show that gravity may have an acute effect on correlated drift distances between the two particles.

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