

Abstract Submitted
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The Gravity Probe B Relativity Mission (GP-B)¹ C.W. FRANCIS
EVERITT, Stanford University — The Relativity Mission, Gravity Probe B (GP-B), was launched on April 20, 2004 and successfully acquired science data from August 27, 2004, to August 15, 2005. The liquid helium cryogen was exhausted on September 29, 2005. Using four high precision gyroscopes, GP-B measured the relativistic precessions of the inertial frame of reference in a 642 km polar orbit. Two precessions are predicted in Einstein's theory of General Relativity: that due to the geodetic effect, of rate 6.6 arcsec/year, and that due to the frame dragging effect, of rate 0.042 arcsec/year. Comprehensive calibrations were performed before and after the science mission. Detailed science and engineering results are presented in four invited talks and multiple poster presentations at this meeting.

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