

Precision timing of PSR J1012+5307 and strong-field GR tests

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We report on the high precision timing analysis of the pulsar-white dwarf binary PSR J1012+5307. Using 15 years of multi-telescope data from the European Pulsar Timing Array (EPTA) network, a significant measurement of the variation of the orbital period is obtained. Using this ideal strong-field gravity laboratory we derive theory independent limits for both the dipole radiation and the variation of the gravitational constant.

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