

# Precision strong-field tests of GR using binary and Double Pulsars

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Binary pulsars allow tests of theories of relativistic gravity that go beyond the weak-field limit of the solar system. Recent tests, in particular those using the Double Pulsar, even match the precision of most current solar system tests. Indeed, the Double pulsar provides a unique laboratory for tests of general relativity as it shows a large number of relativistic effects simultaneously. We observe gravitational redshift, a Shapiro delay, a precession of the orbit as well as an decay of the orbit with a rate of 7mm/day due to gravitational wave emission. Signatures of relativistic spin-orbit coupling are already evident, and one can use the system also to demonstrate the existence of frame-dragging. In this talk I will review the tests of general relativity provided by the double pulsar and summarize complementary tests using other binary pulsars.