

20 years of testing GR with the Double Pulsar

Thursday, 26 October 2023 09:00 (30 minutes)

Pulsars are extremely stable natural clocks and, when found in a relativistic binary system, they can be used as exceptional laboratories to test Relativistic gravity in the strong field regime. In this talk I will present the results obtained in this context by studying the now 20-year-long dataset on the double pulsar system J0737-3039A/B, the only binary hosting two active radio pulsars, and one of the most relativistic systems known to date. The double pulsar laboratory has indeed allowed us to confirm the validity of GR at least at 99.99% and to measure several relativistic effects for the first time.

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