

Etta Kavanagh
Letters Editor
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In their report “Tests of General Relativity from Timing the Double Pulsar” (6 October, p. 97), Kramer et al. claim they have verified Einstein’s General Relativity Theory to an accuracy of 0.05% by four independent tests. See also Cho’s news story 15 September, p.1556.

The data present pulse timing measurements of the binary radio pulsar system PSR J0737-3039A/B for 2.5 years. In this paper the “masses”^{1, 2, 3} of the two pulsars were not determined directly. The authors have *assumed* that Einstein’s equation for the advance of the perihelion, or periastron here is correct and they have calculated the presumed parameters. Furthermore, to fit the data with the theory they have accepted 68% confidence ranges, which is statistically not significant.

Data presented in this paper do not support the authors’ claim. Observations of the rate of orbital period change of the 11-minute X-ray binary 4U 1820-30 for more than 13 years, do not support loss of energy through gravitational radiation.⁴ No gravitational wave signals have been detected by the two 4 km long laser interferometers LIGO.⁵

References and Notes

¹ What is meant by the word “mass” used here and in most of current literature is “gravitational force,” see (2 & 3).

² P. Spolter, *Gravitational Force of the Sun* (Orb Publishing, California, 1994).

³ P. Spolter, “New Concepts in Gravitation,” *Physics Essays* **18**, 37-50 (2005).

⁴ J. Tan et al., *Astrophys. J.* **374**, 291 (1991).

⁵ B. Abbott et al., *Class. Quantum Grav.* **23**, S29 (2006).

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