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Einstein's gravity as seen by a cosmic lighthouse keeper

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We can only speculate but presumably Albert Einstein would be delighted to see the experiments possible today that are made to test his theory of gravity. Among the most precise ones are tests with binary pulsars, which provide in particular information about the strong-field regime. From observations of pulsars we can test a large variety of relativistic effects or concepts deeply embedded in the framework of theories of gravity, including the existence of gravitational waves or the validity of the strong equivalence principle. This talk summarizes the latest experiments and tests provided by the cosmic lighthouses that we call pulsars. The corresponding observations provide the best limits on the validity of general relativity and alternative theories of gravity.