

## WAS EINSTEIN RIGHT?

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How has the most celebrated scientific theory of the 20th century held up under the exacting scrutiny of planetary probes, radio telescopes, and atomic clocks? After 100 years, was Einstein right? In this lecture, celebrating the 100th anniversary of Einstein's "miracle year" and the World Year of Physics, we relate the story of testing relativity, from the 1919 measurements of the bending of light to the 1980s measurements of a decaying double-neutron-star system that reveal the action of gravity waves, to a 2004 space experiment to test whether spacetime "does the twist". We will show how a revolution in astronomy and technology led to a renaissance of general relativity in the 1960s, and to a systematic program to try to verify its predictions. We will also demonstrate how relativity plays an important role in daily life.