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Abstract for an Invited Paper for the APR21 Meeting of the American Physical Society

Einstein Prize (2021): Is Einstein Still Right?¹

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In the spring of 1969, a nave first-year graduate student from Canada was told by his Caltech advisor Kip to find out everything that was known at that time about the experimental tests of general relativity. Joseph Weber had just claimed the first detection of gravitational waves, contrary to all conventional wisdom, and Kip worried that general relativity might be wrong. At the time, the experimental evidence supporting the theory was thin, but change was in the air. Thus began a 50-year quest to answer the question: Was Einstein Right? That quest took the student from the Earth and the solar system to binary neutron stars; from the massive black hole in our own galaxy to merging black holes billions of light years away. We will give a broad overview of the themes and questions that drove this quest, drawing attention to some of the remarkable individuals encountered along the way.

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