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Gravitational-wave polarizations beyond general relativity: recent results and future prospects MAXIMILIANO ISI, Caltech — Polarizations are a fundamental property of the geometry of gravitational waves (GWs), determining the directions in which space is stretched and squeezed as the waves whiz by. With the detection of GW170814, we have obtained some direct evidence that GW polarizations are as Einstein predicted—but there is much more to be learned with future measurements. In this talk, I will review the basics of GW polarizations, summarize the implications of recent compact-binary detections, and outline future ways to study this basic property of gravity with ground-based detectors.

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