

Beyond Einstein Gravity

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ABSTRACT

One hundred years after "Die Feldgleichungen der Gravitation" by Albert Einstein and at the beginning of a new era of direct gravitational detections, the time is right to pause and ponder about the nature of the particle carrier of the gravitational force: the graviton. To unify the theory of gravity with the other forces of nature we expect the theory of General Relativity to be modified at small distances. Could it be that General Relativity is also modified at large distances as large as our current observable Universe? This may depend on the very nature of the graviton.