

New high precision tests of General Relativity

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General Relativity (GR) is a consequence of the Einstein Equivalence Principle. Accordingly, tests of GR are either test of its foundation or test of consequences of GR. In general, tests of the foundations are zero tests. Test of predictions of GR rely on certain notions like standard clocks or nonrotating frames which can be defined within GR and which are basic in the prediction of certain numerical values for particular effects. We outline the structure of these tests and report on recent high precision laboratory tests of foundations and of consequences of GR. At the end the importance of quantum tests of GR emphasized and the importance of fundamental tests for practical applications is outlined.

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