The Low-Energy Frontier of Particle Physics



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Long range forces: A theory review

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Various types of BSM physics, in particular new light particles, can lead to long-range forces. We can search for such "fifth force" interactions by sensitivity measuring gravity on various scales. In this talk, I will review how such long-range forces can be generated and how they lead to apparent violations of the inverse-square law and the equivalence principle of gravity. I will also discuss the of different types of long-range forces and give an overview of which kinds of BSM physics that long-range forces can be used to test.

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