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## $\delta$ Gravity, $\delta$ matter and the accelerated expansion of the Universe

Thursday 5 July 2018 12:00 (30 minutes)

A gravitational field model based on two symmetric tensors, g and  $\tilde{g}$ , is presented. In this model, new matter fields are added to the original matter fields, motivated by an additional symmetry ( $\delta$  symmetry). We call them  $\delta$  matter fields. We find that massive particles do not follow geodesics, while trajectories of massless particles are null geodesics of an effective metric. Then we study the Cosmological case, where we get an accelerated expansion of the Universe without dark energy.

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