## PROCEEDINGS OF SCIENCE



## The cosmological constant and quantum vacuum

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The acceleration of the expansion can now be regarded as established beyond reasonable doubt. However, the physical origin of this acceleration, the so-called dark energy, remains a puzzling problem in fundamental physics. The current explanations, quintessence and modified gravity, are based on a fundamental revision of known physics.

Here I will present a revival of an old proposition : that the origin of cosmic acceleration is due to the gravitational active vacuum.

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