

**Bar Ilan University , Special Seminar**

**Prof. Vincent Desjacques**

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**Room 301, Physics Bld. 202**

**Probing fundamental physics with galaxy surveys**

Upcoming galaxy surveys will enable us to test the assumptions of the standard cosmological model which pertain to the nature of dark matter and dark energy, the origin of the primeval fluctuations and the law of gravity. In this talk, I will describe recent observational and theoretical developments, with an emphasis on the complications that arise from the complex relationship between luminous galaxies and the matter distribution.