



**Irfu**

Institut de recherche  
sur les lois fondamentales  
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# Séminaire joint DPhP-DAp de Cosmologie

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Online (Zoom)

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## **Future observations of the primordial, polarized Cosmic Microwave Background : expected science and challenges**

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Testing inflation has become one of the main goals in observational cosmology, and one of the scientific priorities for the new generation of Cosmic Microwave Background projects. A race to more sensitive focal planes, combined to a high control of the instrumental and astrophysical systematic effects, is at play across the globe. In this talk, I will review some of the current and future observational efforts which are all aiming at detecting the inflationary, primordial gravitational waves. I will provide more details on two of them : the Simons Observatory, which will achieve its first light in 2021-2022, and the LiteBIRD satellite, expected to be launched in 2028. I will finally illustrate some of the current challenge that the scientific community has to face, and its plans to overcome them.

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