Physics Colloquium

Thursday, 10 April 2025 | 17:00 – 18:00

N. Petridis auditorium, Dept. of Mathematics & Applied Mathematics

Looking before the Big Bang using gravitational waves

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ABSTRACT

I will first explain why in modern cosmology the Big Bang no longer represents the beginning of everything, including time itself. I will then argue that quantum mechanics plays a crucial role during the phase that preceded the Big Bang. Finally, I will discuss how present and future experiments allow to probe the physics of that "pre-Bangian" era with particular emphasis on those connected to gravitational waves.