SEMINARIO

Departamentos de Física Teórica I y II Universidad Complutense de Madrid

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TITULO: The quantum echo of the early Universe

LUGAR: FACULTAD DE CIENCIAS FÍSICAS UCM

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ABSTRACT:

By applying quantum informational and optical tools to quantum gravity theories in the very early universe, we show that the fluctuations of quantum fields as seen by late comoving observers are significantly influenced by the history of the early universe, transmitting information about the nature of the universe in timescales when quantum gravitational effects where non-negligible. This might be observable even nowadays thus used to build falsifiability tests of quantum gravity theories.