



University of Crete
Department of Physics

Physics Colloquium

Thursday, 08 October 2026 | 17:00 – 18:00, Seminar Room 3rd Floor

Strings, the Swampland and Primordial Black Holes

Prof. Dr. Dieter Lüst

Max Planck Institute for Physics, Germany

ABSTRACT

In this colloquium I will give a short introduction to Quantum Gravity and its realisation by String Theory. As known for some time, string theory predicts a huge landscape of vacua, seen as different effective theories at low energy. However, as it became evident during the recent years, the space of theories that cannot originate from string theories is much larger than the landscape, and hence usually dubbed as the so-called swampland. I will discuss some of the properties of the swampland scenario and how it has recently led to some predictions about dark energy, dark matter and primordial black holes.
