



Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

CLUSTER OF EXCELLENCE
QUANTUM UNIVERSE



DESY and University of Hamburg Colloquium

Strings, the Swampland and Primordial Black Holes

Speaker: Prof. Dr. Dieter Lüst
Max-Planck-Institut for Physics, Garching/München

This colloquium introduces quantum gravity and its realization in string theory. While string theory predicts a vast landscape of consistent vacua, an even larger set of low-energy theories – the so-called swampland – is incompatible with key principles of quantum gravity. The talk highlights some of these swampland principles and explores their implications for dark energy, dark matter, and primordial black holes.

This colloquium marks a special occasion:

Prof. Dr. Jan Louis will be awarded the Wilhelm und Else-Heraeus Senior Professorship for innovative teaching concepts in the field of physics.

**Tuesday,
April 21, 2026, 16:00
Notkestraße 85
DESY Auditorium**

**WILHELM UND ELSE
HERAEUS-STIFTUNG**



FACULTY
OF MATHEMATICS, INFORMATICS
AND NATURAL SCIENCES

DEPARTMENT
OF PHYSICS