



**UNIVERSITÄT  
BIELEFELD**



Faculty of Physics

# Colloquium

**Christian Maes**

**KU Leuven**

## **Statistical Mechanical Perspectives on Cosmological Puzzles**

We review some well-known paradoxes in cosmology and give a statistical mechanics reading. Puzzles to be touched include the horizon and the flatness problem, the information paradox, the dark energy problem and the origin of the so called space roar.

Each time, we emphasize the role of statistical arguments to complement the dynamical understanding. In the end, we argue, statistical mechanics clarifies important aspects of the problems and has a great future in contributing to the understanding of newly observed "fluctuation" features of our cosmos.

**Monday, 19. April 2021, 16.15 hrs MESZ**

Zoom Conference Call— Please contact Peter Reimann  
(reimann@physik.uni-bielefeld.de) for details regarding access