

Institut für Christliche Philosophie

## Einladung zum GASTVORTRAG

## Charlotte Werndl (University of Salzburg)

## On Defining Climate and Climate Change

Mi., 12.6. 2024, 16.45 Uhr s.t., SR VI (Karl-Rahner-Platz 3, 1. Stock)

The aim of the talk is to provide a clear and thorough conceptual analysis of the main candidates for a definition of climate and climate change. Five desiderata on a definition of climate are presented: it should be empirically applicable, it should correctly classify different climates, it should not depend on our knowledge, it should be applicable to the past, present and future and it should be mathematically well-defined. Then three definitions are discussed: climate as distribution over time when the external conditions vary as in reality, climate as distribution over time relative to regimes of varying external conditions and climate as the ensemble distribution when the external conditions vary as in reality. The third definition is novel and is introduced as a response to problems with existing definitions. The conclusion is that most definitions encounter serious problems and that the third definition is most promising.



Foto: Charlotte Werndl

Charlotte Werndl (Professor of Logic and Philosophy of Science, Department of Philosophy, University of Salzburg) is an associate editor of Philosophy of Science and serves on a number of editorial and advisory boards. She holds a PhD in Philosophy from the University of Cambridge and master's degrees both in mathematics and philosophy from the University of Salzburg. She has published papers on climate change, statistical mechanics, mathematical knowledge, chaos theory, predictability, confirmation, evidence, determinism, indeterminism, observational equivalence and underdetermination. Her current work focuses on the philosophy of climate science, evidence and the philosophy of statistics and the foundation of statistical mechanics.