



# PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik  
der Johann Wolfgang Goethe-Universität Frankfurt

Mittwoch, den 04.12.2019, 16 Uhr c.t.  
Großer Hörsaal, Raum \_0.111,  
Max-von-Laue-Str. 1



**Prof. Dr. Dominik Schwarz**  
Universität Bielefeld

## *"Tension, crisis, or hot air --- The status of cosmology"*

Increasingly precise measurements in observational cosmology challenge our current understanding of the evolution and composition of the Universe. Local and cosmic inference of the Hubble-Lemaître expansion rate disagree by a statistically significant amount. The strength of large-scale clustering as measured by means of weak gravitational lensing is in tension with its inferred strength from the study of the cosmic microwave background fluctuations.

Other tensions include anomalies of the cosmic microwave sky at the largest angular scales and the cosmic radio dipole. In this colloquium I will review the status of modern cosmology in view of these observational puzzles.

Die Dozenten der Physik

local host: Prof. Dr. Dirk Rischke, drischke@itp.uni-frankfurt.de