

PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik der Johann Wolfgang Goethe-Universität Frankfurt

> Mittwoch, den 12.07.2017, 16 Uhr c.t. Großer Hörsaal, Raum _0.111, Max-von-Laue-Str. 1



Prof. Dr. Ulrich Achatz

Institut für Atmosphäre und Umwelt, Goethe-Universität Frankfurt

" Gravity Waves: From the Laboratory to the Atmospheric Surf Zone"

Even with present and foreseeable computational capabilities, the spatial resolution of atmospheric weather-forecast and climate models is and will remain insufficient to capture many essential processes. Next to clouds and turbulence, subgrid-scale waves and their parameterization are one of the grand challenges of the field. Here, especially buoyancy-driven gravity waves are in the focus. The talk will give an overview of the fundamental properties and atmospheric impacts of these waves. It will describe the lead issues in their handling in models, and it will discuss recent developments towards their solution, ranging from laboratory experiments over theory to atmospheric modeling.

Die Dozenten der Physik

local host: Prof Luciano Rezzolla, rezzolla@itp.physik.uni-frankfurt.de