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04/09/2015

## **E I N L A D U N G**

zu einem Vortrag im Rahmen des

### **Kolloquiums Thermo- und Fluidodynamik**

**Datum:** Mittwoch, 23. September 2015

**Zeit:** 16:15 Uhr

**Ort:** Maschinenlaboratorium ETH Zürich  
**Hörsaal ML H 44**

**Referent:** Prof. Tapio Schneider  
Professur für Klimadynamik, ETH Zürich

**Titel:** **The Turbulent Dynamics of Clouds: Climate Science's Greatest Challenge**

By reflecting shortwave radiation from the Sun, low clouds cool Earth's surface. But how their shortwave reflection is projected to change as greenhouse gas concentrations increase differs widely among climate models. Models that simulate a reduced low cloud cover as the climate warms project strong global warming; models that simulate an increased or less strongly reduced low cloud cover project weaker global warming. Which models are correct is not known, and uncertainties about changes in low-cloud cover dominate uncertainties in climate change projection. Progress in this area will require progress in understanding the turbulent fluid dynamics of clouds.

This talk surveys the fluid dynamics of low clouds and highlights recent progress in constraining the cloud response to warming from space-based observations and from large-eddy simulations.

*Host: PD Dr. Daniel Meyer-Masseti, Prof. P. Jenny*

**Gäste sind willkommen!**

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*Weitere Informationen:* <http://www.ifd.mavt.ethz.ch/events/ktf/ktf-records.html>  
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