

# KlimaCampus Kolloquium

## Prof. Tapio Schneider

at the invitation of the Max Planck Institute for Meteorology  
and the Meteorological Institute, Universität Hamburg

### Dynamics, migrations, and bifurcations of the Intertropical Convergence Zone

Rainfall on Earth is most intense in the intertropical convergence zone (ITCZ), a narrow belt of clouds centered on average around six degrees north of the Equator. On seasonal and longer timescales, the ITCZ migrates, typically toward a warming hemisphere but with exceptions, such as during El Niño events. In some regions, it also bifurcates seasonally into two ITCZs that straddle the equator. Climate models have a well known bias of simulating such double ITCZ too persistently. An emerging framework links the dynamics, migrations, and bifurcations of the ITCZ to the atmospheric energy balance. It may account for ITCZ variations on timescales from years to geological epochs and may help pinpoint causes of modeling biases.

KlimaCampus Hamburg,  
13.11.2014, 3.15 pm, Bundesstrasse 53, room 22/23 (ground floor)