

AG Theoretische Wolkenphysik
Themen für das Meteorologische Seminar

Stand 2. Juni 2014

- **Eismultiplikation in Wolken**

Yano, J.-I., V. Philipps, 2011: Ice-Ice Collisions: An Ice Multiplication Process in Atmospheric Clouds. *J. Atmos. Sci.* 68, 322-333.

- **Transport von Wasserdampf aus den Tropen in die Extratropen**

- Knippertz, P. und H. Wernli, 2010: A Lagrangian Climatology of Tropical Moisture Exports to the Northern Hemispheric Extratropics. *J. Climate*, 23, 987-1003.

- Zhu, Y., R. Newell, W. Read, 2000: Factors Controlling Upper-Troposphere Water Vapor. *J. Climate*, 13, 836-848.

- **Flache Konvektion als Räuber-Beute-Modell**

- Koren, I. and G. Feingold, 2011: Aerosol-cloud-precipitation system as a predator-prey problem. *Proc. Nat. Acad. Sci.*, 108, 12227-12232.

- Feingold et al., 2010: Precipitation-generated oscillations in open cellular cloud fields. *Nature*, 466, 849-852.

- **Feuchte Rayleigh-Bénard Konvektion**

- Pauluis, O. and J. Schumacher, 2010: Idealized moist Rayleigh-Bénard convection with piecewise linear equation of state. *Comm. Math. Sci.*, 8, 295-319.

- Pauluis, O. and J. Schumacher, 2011: Self-aggregation of clouds in conditionally unstable moist convection. *Proc. Nat. Acad. Sci.*, 108, 12623-12628.

- Weidauer, T., O. Pauluis, and J. Schumacher, 2010: Cloud patterns and mixing properties in shallow moist Rayleigh-Bénard convection. *New Jour. Phys.*, 12, 105 002.

- **Klimasensitivität**

- Roe, G. and M. Baker, 2007: Why is climate sensitivity so unpredictable? *Science*, 318,629-632.

- Roe, G., 2009: Feedbacks, Timescales, and Seeing Red. *Annu. Rev. Earth Planet. Sci.*, 37, 93-115.

- **Stratosphären-Troposphären-Austausch (STE)**

- Sprenger, M. and H. Wernli, 2003: A northern hemispheric climatology of cross-tropopause exchange for the ERA15 time period (1979-1993) *J. Geophys. Res.*, 108, doi:10.1029/2002JD002636

- Bourqui, M.S., 2006: Stratosphere-troposphere exchange from the Lagrangian perspective: A case study and method sensitivities, *Atmos. Chem. Phys.*, 6, 2651-2670