

JOHANNES GUTENBERG-UNIVERSITÄT MAINZ - 55099 Mainz

## Einladung zum Vortrag im Oberseminar Analysis

### *Stochastic Primitive Equations*

Martin Saal (TU Darmstadt)

We consider the stochastic primitive equations for geophysical flows subject to transport noise and turbulent pressure. Admitting rough noise terms, the global existence and uniqueness of solutions to this stochastic partial differential equation are proven using stochastic maximal  $L^2$ -regularity, the theory of critical spaces for stochastic evolution equations, and global a priori bounds. Compared to other results in this direction, we do not need any smallness assumption on the transport noise, which acts directly on the velocity field and we also allow rougher noise terms. Adaptations to Stratonovich type noise are discussed as well.

**Alle Interessierten sind herzlich eingeladen!**

**Datum:** Montag, 24.01.2022

**Uhrzeit:** 14:15 Uhr

**Ort:** 04-230

FACHBEREICH 08



INSTITUT FÜR  
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