

MARTINA ZÄHLE

Mathematical Institute, University of Jena

**Semigroups and stochastic partial (pseudo) differential equations  
on measure spaces**

Abstract: Pathwise defined stochastic semilinear parabolic (pseudo) differential equations in  $\sigma$ -finite measure spaces are studied. We obtain existence, uniqueness and regularity results for a broad class of problems. The hypotheses are formulated in terms of associated semigroups and regularity is measured by means of abstract potential spaces. In particular, we consider fractional heat equations driven by fractional Brownian noises on metric measure spaces. (Joint work with Michael Hinz)