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**Approximating Evolution Equations with Random Coefficients**

**Abstract:**

Solving evolution equations with random coefficients numerically requires discretizing in space, time and of random parameters. As numerical methods for all three discretisations are well-known, it is natural to ask under which conditions they can be combined. In this talk, we discuss this question with a special emphasis on preservation of strong convergence rates.

A common approach to spatial discretization consists of solving the weak formulation on finite-dimensional approximating spaces. We present a novel quantified version of the Trotter-Kato theorem in this setting, yielding rates of strong convergence under a joint condition on properties of the corresponding form and the approximating spaces.

This is joint work with Christian Seifert (TUHH).

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