# Master-Seminar "Stochastic ODE"

## Ben Schweizer, TU Dortmund, Winter 2024/25

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### Themen

We want to work through [1] and want to learn some ideas of [2].

- 1. Introduction, B.S.
- 2. Basic probability theory I, J.C.
- 3. Basic probability theory II, D.W.
- 4. Brownian motion and white noise, T.S.
- 5. Stochastic integration, J.Z.
- 6. Stochastic ODE, L.S.
- 7. Applications, C.I.
- 8. Stochastic PDE I, F.L.
- 9. Stochastic PDE I, J.F.

## References

- An Introduction to Stochastic Differential Equations. Lawrence C. Evans. University of California, Berkeley, Berkeley, CA
- [2] An Introduction to Stochastic PDEs. Martin Hairer, 2024