

# Master-Seminar “Stochastic ODE”

Ben Schweizer, TU Dortmund, Winter 2024/25

7.10.2024

Ort und Zeit unserer Treffen: Voraussichtlich *Donnerstag 16:00–17:30, Raum 336*.  
Start voraussichtlich 17.10.2024

## 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

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