

## Agenda – Final Workshop DeepTurb 2024

Hotel – Restaurant Erich Rödiger GmbH  
Zur Herrgottsmühle 2  
96231 Bad Staffelstein

### Wednesday, 11 September 2024

Arrival at Hotel

(9:18 IL – 10:17 EF Hbf -> 10:31 EF Hbf – 11:15 Bamberg -> 11:22 Bamberg – 11:39 Bad Staffelstein)

12:00-13:30 Lunch

13:30-13:35 Jörg Schumacher – Welcome

13:35-14:20 Johannes Viehweg (35+10) *Towards deterministic Reservoir Computing for chaotic and turbulent time series*

14:20-15:05 Mohammad Sharifi Ghazijahani (35+10) *Modeling turbulence via echo state networks*

15:05-16:00 Coffee break

~~Shailendra Kumar Rathor (35+10) *Asymmetrically connected reservoir networks learn better* - entfällt krankheitsbedingt -~~

16:00-16:45 Anja Bartelmei (35+10) *Spatio-temporal reservoir computing using the example of motion detection*

18:30-19:30 Joint dinner (Hotel) and free time

### Thursday, 12 September 2024

09:00-09:45 Theo Käufer (35+10) *Physics-informed Kolmogorov-Arnold networks for Rayleigh-Bénard convection*

09:45-10:30 Philipp Teutsch (35+10) *Slim multi-scale CAE-ROM training*

10:30-11:00 Coffee break

11:00-12:00 **Keynote: Lina Jaurigue, TU Ilmenau (50+10) *Predicting chaotic dynamics using small networks***

12:00-13:30 Lunch

13:30-14:15 Friedrich Philipp (35+10) *Error bounds on Koopman regression for learning dynamics*

14:15-15:00 Jan Heiland (35+10) *Extended Linearizations and Reduced Order Coordinates for Nonlinear Flow Control*

15:00-15:30 Coffee break

15:30-18:30 Joint hike to Kloster Banz, see the picture (bad weather – Obermaintherme)

18:30-19:30 Joint dinner (Hotel) and more free time

### **Friday, 13 September 2024**

09:00-09:45 Philipp Pfeffer (35+10) *Koopman framework for nonlinear dynamical systems as a quantum algorithm*

09:45-10:30 Joint discussion: *What are the main outcomes & results of our Zeiss project?*

10:30-11:00 Coffee break

11:00-11:45 Joint discussion: *How can we move on from here?*

11:45-12:00 Jörg Schumacher – Closing

12:00-13:15 Lunch

13:15 Check out



Kloster Banz