Agenda – Annual Workshop DeepTurb 2023

Benediktbeuern, 18 to 21 September 2023
Gästehaus der Salesianer Don Boscos (Kloster Benediktbeuern,
Don-Bosco-Str. 1, 83671 Benediktbeuern

Monday, 18 September 2023

Arrival at Hotel and check-in until **5 pm** (!)
free time

Tuesday, 19 September 2023

09:00-09:15 Jörg Schumacher: Welcome

09:15-10:15 Friedrich Philipp
Koopman-invariant reproducing kernel Hilbert spaces and regularity (45+15)

10:15-10:45 Coffee break

10:45-11:45 Johannes Viehweg
Temporal Convolutions derived Reservoir Computing (45+15)

12:00-13:15 Lunch

13:15-14:30 Stefan Klus (Edinburgh)
Transfer operators on graphs: Spectral clustering and beyond (55+20)

14:30-15:15: Short impulse talk or discussion (Karl, Patrick, Christian oder Jörg)

15:15-15:45: Coffee break

15:45-16:45: Philipp Schmitz
Risk bounds for reservoir computing (45+15)

16:45-17:45 Theo Käufer
Autoencoders for complementing experimental data and new developments for 3D3C + T particle tracking (45+15)

17:45-18:00 Short PI Meeting

18:00-19:00 joint dinner (Kloster) and free time

Wednesday, 20 September 2023

08:30-09:30 Philipp Teutsch
Learning representative embeddings of turbulent high-dimensional data (45+15)

09.30-10:30 Shailendra Rathor
Small-world networks as a reservoir? (45+15)

10:30-11:00 Coffee break

11:00-12:00 Till Preuster
On the relation between echo state networks and photonic reservoir computing (45+15)

12:00-13:30 Lunch

13:30-14:30 Mohammad Sharifi Ghazijahani
Spatial prediction of turbulent flows using ESNs (45+15)

14:30-15:00 Coffee break

Good weather: Hiking tour
Bad weather: Discussions

18:00-19:00 joint dinner (Kloster) and free time

Thursday, 21 September 2023

09:30-10:30 Florian Heyder
Generative convective parametrization of a convective boundary layer (45+15)

10:30-11:00 Coffee break

11:00-12:00 Philipp Pfeffer
Hybrid quantum-classical reservoir computing (45+15)

12:00-12:05 Jörg Schumacher: Closing

12:05-13:00 Lunch

13:30 Check out, Departure from Bediktbeuern