

Wednesday, June 10th, 2026
08:30-09:00 Meeting Check-In

09:00-09:10 J. Schumacher, M. Chertkov, K.R. Sreenivasan
[Opening & Welcome](#)

09:10-10:00 J. Schumacher
[Introduction & Scope of discussion meeting](#)

10:00-10:20 Coffee Break

10:20-11:10 C. Cierpka
[STELLA – a modular framework for Spatio-Temporal Event-based Lagrangian particle tracking](#)

11:10-12:00 O. Pauluis
[Deep and shallow moist convection models](#)

12:00-13:00 Joint Lunch

13:00-13:50 M. Wilczek
[Ensemble modeling of high Reynolds number turbulence](#)

13:50-14:40 N. Thuerey
[Generative AI for learned PDE solving](#)

14:40-15:00 Coffee Break

15:00-15:50 Y. Yang
[Quantum computing of fluid dynamics via Hamiltonian simulation](#)

15:50-16:40 J.P. Mellado
[Atmospheric turbulence](#)

16:40-16:50 Short Break

16:50-18:00 First Discussion Round
K.R. Sreenivasan: [What could be done when turbulence meets quantum computing?](#)

19:00-21:00 Joint Dinner & End of Day 1

Thursday, June 11th 2026

09:00-09:50 T. Gotoh

Challenges for direct numerical simulations and hierarchical computation

09:50-10:20 Coffee Break

10:20-11:10. D. Jaksch

Variational Quantum Computational Fluid Dynamics

11:10-12:00 M. Chertkov

Generative AI as non-equilibrium statistical physics and control

12:00-13:00 Joint Lunch

13:00-13:50 S. Peitz

Sample efficiency in data-driven surrogate modeling of large-scale dynamical systems

13:50-14:40 P. Hassanzadeh

What AI can and cannot do for turbulence modeling?

14:40-15:10 Coffee Break

15:10-16:00 C. Gerbig

Time-reversed Lagrangian Particle Dispersion Modeling: Applications to Greenhouse Gas Monitoring

16:00-16:50 P. Givi

Tensor networks for direct and large eddy simulation of compressible and reacting turbulent flows

16:50-17:00 Short Break

17:00-18:00 Second Discussion Round

M. Chertkov: Limits and prospects of physics-informed data-driven modeling

End of Day 2 & Free time to explore Weimar, dinner on your own

Friday, June 12th 2026

09:00-09:50 L. Biferale

Generative AI tools for quantitative data augmentation of multi-phase turbulent flows: challenges and benchmarks

09:50-10:20 Coffee Break

10:20-11:10 J. J. Mendoza Arenas

Simulation of fluid dynamics on analog bosonic systems

11:10-12:00 Final Discussion Round

J. Schumacher, M. Chertkov, K.R. Sreenivasan: **Wrap-Up and the road ahead**

12:00-13:00 Joint Lunch & Depature