

ESM User Forum 2024

FZJ-JSC, March 12-14, 2024 (online: <https://webconf.fz-juelich.de/b/ste-jrn-6gt>)

Agenda

March 12

- 13:00-13:30 Welcome & Introduction (Lars Hoffmann, FZJ/JSC)
- 13:30-14:00 JUPITER & JUREAP (Mathis Bode, FZJ/JSC)
- 14:00-14:30 Compute time perspectives (Johannes Simonis, FZJ/JSC)
- 14:30-15:00 ICON developments to enable km-scale coupled climate simulations (Luis Kornblüh, MPI-Met)
- 15:00-15:30 Towards exascale climate modelling with IFS-FESOM (Thomas Jung, AWI)
- 15:30-15:45 Discussion: urgent computing needs

March 13

- 13:00-13:30 JSC and the ESM Partition: News and Feedback (Olaf Stein, FZJ/JSC)
- 13:30-14:00 Assessing WHO2021 air quality guideline levels in Europe: Population exposure and PM2.5 reduction potential (Philipp Franke, FZJ/IEK-8)
- 14:00-14:30 Introduction to a CNN-driven Error Correction Approach for Enhancing Hydrometeorological Forecasting (Kaveh Patakchi Yousefi, FZJ/IBG-3)
- 14:30-15:00 AtmoRep - a foundation model for atmospheric dynamics (Michael Langguth, FZJ/JSC)
- 15:00-15:30 DETECT & TSMP developments (Stefan Poll, FZJ/IBG-3)
- 15:30-15:45 Discussion: AI usage, GPUs, DSL

March 14

- 13:00-13:30 CFD meets ESM (Mathis Bode, FZJ/JSC)
- 13:30-14:00 Ensemble data assimilation for coupled modeling in the Earth system (Lars Nerger, AWI)
- 14:00-14:30 Data compression methods (Sabine Griebach, FZJ/JSC)
- 14:30-15:00 Data compression of ERA5 meteorological reanalysis files and their application to trajectory calculations with MPTRAC (Farahnaz Khosrawi, FZJ/JSC)
- 15:00-15:30 zarr and embedding networks method (Martin Schultz, FZJ/JSC)
- 15:30-15:45 Discussion: workflows and data handling