



Workshop at IT4Innovations Supercomputing Centre

HPC in Atmosphere modelling and Air Related Environmental Hazards

Ostrava, February 9, 2017

Morning Session (9.30–12.15)

- 9:30–9:45 Vít Vondrák (IT4Innovations Supercomputing Centre):
Welcome address and overview on the workshop
- 9:45–10.15 Michal Kacmarik (Technical University of Ostrava):
Application of Global Navigation Satellite Systems in Meteorology
- 10.15–10.45 Pavel Krč, Jaroslav Resler (Medard):
Urban surface module for the PALM microscale atmospheric model
- 10.45–11.15 Coffee Break
- 11.15–11.45 Malte Braack (Christian-Albrechts-University of Kiel):
Mesh and model adaptivity for atmospheric chemistry transport models
- 11.45–12.15 Jan Martinovic (IT4Innovations Supercomputing Centre):
Modelling of a Spread of Hazardous Substances in a Floreon+ System using OpenFOAM

Lunch Break

- 12:15–13.30 Lunch at Restaurace Pustkovecká Bašta
(<http://www.pustkoveckabasta.cz/>)
- 13:30–14.15 Tour through IT4Innovations supercomputing center

Afternoon Session (14.30–18.00)

- 14.30–15.00 Petr Skalák, Aleš Farda, Pavel Zahradníček, Petr Štěpánek, Miroslav Trnka (CzechGlobe):
Weather and climate data use at CzechGlobe centre: from research to operational products
- 15.00–15.30 Václav Ryška (IT4Innovations Supercomputing Centre):
Scalable solution of large scale advection-diffusion problems by HFETI method
- 15.30–16.00 Michael Bader (Technical University of Munich):
Towards an Exascale Hyperbolic PDE Engine
- 16:00–16.30 Coffee Break
- 16:30–17.00 Zbigniew Piotrowski (IMGW – Polish National Weather Service)
Towards energy-efficient conservative dynamical cores for weather prediction
- 17:00–17.30 Megi Sharikadze (Leibniz Supercomputing Centre):
Partnership initiatives of LRZ in Environmental Computing
- 17:30–17.45 Closing remarks

Informal Dinner on Wednesday and Thursday

- Wed, 19.00 Restaurace U Jarošů (<http://www.ujarosu.cz/>)
- Thu, 18.30 Restaurace Bílý Kartáč (<http://www.kartac.cz/bilykartac/>)

Please understand that lunch and dinner(s) have to be at your own expenses, as there is no registration fee for the workshop.