

Parallel Session WG PHY Surface and PBL

Monday, 14 September 2026, 09:00 – 15:30 CEST

Chair: Jan-Peter Schulz, Room Plenary

Online: <https://comlog.webex.com/comlog/j.php?MTID=m93d7102ddece2aa6ad41925956d1763d>

09:00 – 09:45	Jan-Peter Schulz	Introduction and overview of on-going research
09:45 – 10:00	Jürgen Helmert, Sascha Brand, Mikael Stello, Jochen Förstner, Christian Steger, Linda Schlemmer	Advances in ICON External Parameter generation and land surface modelling: High-resolution soil and water-body processing, operational EXTPAR production with Zonda, and a standalone TERRA diagnostic framework
10:00 – 10:15	Nander Weber	Multi-layer snow model NIX: Status update
10:15 – 10:30	Günther Zängl	Expansion of the skin temperature concept on snow in ICON
10:30 – 11:00	All	COFFEE BREAK
11:00 – 11:10	Christian R. Steger, David Leutwyler, Marco Arpagaus, Christoph Schär	Updates on the grid- and subgrid-scale radiation-topography scheme in ICON
11:10 – 11:20	All	Discussion on land surface processes
11:20 – 11:35	Daniela Littmann, Alberto de Lozar, Matthias Raschendorfer, the GLORI Team	The implementation of the Leonard terms: First results
11:35 – 11:50	Maïke Ahlgrimm, Eileen Päsche	Evaluation of turbulence properties by Doppler-Lidar measurements
11:50 – 12:00	Jochen Förstner	A new diagnostic for PBL height
12:00 – 12:10	Leonardo Beltrami, Chiara Marsigli, Enrico Minguzzi, Davide Cesari, Navid Mouji, Alessandro Bracci, Francesca Barnaba	Sensitivity analysis of Planetary Boundary Layer height parameterization in the ICON - CHIMERE modeling chain
12:10 – 12:30	Matthias Raschendorfer	STIC and other extensions for turbulence in ICON

28th COSMO General Meeting

Rome, Italy
14-18 September 2026

12:30 – 14:00	All	LUNCH
14:00 – 14:15	Dmitrii Mironov, Ekaterina Machulskaya	TKESV turbulence scheme within ICON: Implementation details and some possibly useful hints
14:15 – 14:30	Roland Wirth	Inclusion of wind farm impacts into ICON simulations
14:30 – 14:40	Mario Raffa	Coupled ICON-A/ICON-O-LAM experience at CMCC
14:40 – 14:55	Michael Baldauf	Some thoughts about the coupling of turbulence schemes with the Discontinuous Galerkin solver
14:55 – 15:00	Lukas Strebel, Moritz Waldmann, Linda Schlemmer	ICON's atmosphere-land-coupling configurations: Coupling TurbDiff/TurbTran with land surface schemes for climate simulations
15:00 – 15:20	Matthias Raschendorfer	Prospects for a clean and numerically stable coupling with a heterogeneous surface
15:20 – 15:30	All	Discussion on PBL
15:30 – 16:00	All	COFFEE BREAK