

# Workshop on surface process coupling and its interactions with the atmosphere

**Programme** 

## Wednesday Agenda

Agenda time displays according to the selected time zone.

### The selected timezone is Europe/London

	Registration and welcome Gustav-Stresemann-Institut (GSI) Europäische Tagungs- und Bildungsstätte Bonn Langer Grabenweg 68 53175 Bonn-Bad Godesberg	
07:30 to 07:50	Registration	
07:50 to 08:00	Welcome	Peter Dueben (ECMWF)
	Today's Earth system models part 1 Chair: Charles Pelletier, co-chair: Luise Schulte	
08:00 to 08:20	Effects of an interactive ocean component on NWP: Lessons learned so far and some thoughts on future directions	Sarah Keeley (ECMWF)
08:20 to 08:40	Coupled Modelling at the Met Office	Tim Graham (Met Office)
08:40 to 09:00	Advancing atmosphere-wave-ocean coupling to improve surface wind and wave forecasts for maritime shipping Virtual presentation	Steve Penny (Sofar Ocean)
09:00 to 09:30	Coffee break	
	Today's Earth system models part 2 Chair: Sarah Keeley, co-chair: Josh Kousal	
09:30 to 09:50	Coupled Canadian Arctic Prediction System (CAPS) at Environment Canada	Jean-Philippe Paquin (Meteorological Research Division, ECCC)
09:50 to 10:10	Regional coupled modelling at km-scale over the UK: the RCS-UKC4 configuration	Segolene Berthou (Met Office)

10:10 to 10:30	Land surface-atmosphere interactions simulated by the ICON atmospheric model	Jan-Peter Schulz (DWD)
10:30 to 11:10	Discussion on ESM models	
11:10 to 12:10	Lunch break	
	Coupling strategies and tools Chair: Peter Dueben, co-chair: Charles Pelletier	
12:10 to 12:30	YAC (Yet Another Coupler)	Moritz Hanke (Deutsches Klimarechenzentrum GmbH)
12:30 to 12:50	Coupling Earth System Model Components using the Atlas library	Willem Deconinck (ECMWF)
12:50 to 13:10	Coupling approaches for data-driven Earth system model components	Lorenzo Zampieri (ECMWF)
13:10 to 13:30	Waveform Relaxation for Atmosphere- Ocean-Sea Ice Coupling	Valentina Schüller (Lund University)
13:30 to 14:10	Discussion on coupling strategies and tools	
14:10 to 14:40	Group photo and coffee break	
	Perspective discussions	
14:40 to 15:25	Breakout groups in split rooms	
15:25 to 16:10	Breakout groups join in main room and exchange	
16:10 to 16:20	Convenience break	
	Posters	
16:20 to 16:30	Poster introductions	
16:30 to 18:30	Poster session with drinks	
19:00 to 21:00	Self-funded dinner L'Osteria (in der Suerst)	

## Thursday Agenda

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07:30 to 08:00	Arrival and registration Gustav-Stresemann-Institut (GSI) Europäische Tagungs- und Bildungsstätte Bonn Langer Grabenweg 68 53175 Bonn-Bad Godesberg	
	Energy cycle part 1 Chair: Luise Schulte, co-chair: Sarah Keeley	
08:00 to 08:20	Momentum, heat and moisture exchange between the atmosphere and sea ice: Observations and Parameterizations	lan Renfrew (University of East Anglia)
08:20 to 08:40	Towards energetically consistent ocean- wave coupling	Lars Czeschel (University of Hamburg)
08:40 to 09:00	On the challenges of vegetation - atmosphere coupling in the roughness sublayer of a numerical weather prediction system	Metodija (Meto) Shapkalijevski (SMHI)
09:00 to 09:40	Coffee break	
	Energy cycle part 2 Chair: Josh Kousal, co-chair: Charles Pelletier	
09:40 to 10:00	Wind profile in the wave boundary layer	Lichuan Wu (Uppsala University)
10:00 to 10:20	How waves and the ocean impact surface wind extremes in extra tropical cyclones	Sophia Brumer (Laboratoire d'Aérologie)
10:20 to 10:40	Comparing Estimates of Whitecap Coverage from a Spectral Wave Model with Oceanic Observations	Adrian Callaghan (Imperial College London)
10:40 to 11:15	Discussion on energy cycle in break out room	

11:15 to 12:30	Lunch break
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	Water cycle part 1 Chair: Jasper Dennisen, co-chair: Sarah Keeley	
12:30 to 12:50	Discussion on energy cycle together	
12:50 to 13:10	Biophysical feedbacks enhancing dry and hot conditions	Diego Miralles (Ghent University)
13:10 to 13:30	Revisiting bare ground evaporation in the Soil, Vegetation and Snow (SVS) land-surface scheme	Vincent Fortin (Environment and Climate Change Canada)
13:30 to 14:00	Coffee break	
	Water cycle part 2 Chair: Josh Kousal, co-chair: Charles Pelletier	
14:00 to 14:20	Impact of land surface dynamics on temperature forecast performance	Rene Orth (University of Freiburg)
14:20 to 14:40	How well do dynamical seasonal forecasts capture soil-moisture atmosphere coupling? Virtual presentation	Jonathan Day (ECMWF)
14:40 to 15:45	Discussion on water cycle in break out rooms and together	
16:00 to 17:00	Wrap-up, general discussion	