IWR Summer School 2024 Applied Modelling of Climate-sensitive Infectious Disease

Program

Time slot	Session	Instructors	
Day 1 (23/9): Introduction			
08:30-09:00	Registration Place: 5 th floor		
09:00-09:45	Welcome and Official Opening.	Michael Winckler and	
	Introduction round and	Joacim Rocklöv	
	logistics of the applied		
	modelling of climate-sensitive		
	infectious disease summer		
	course (45min)		
	Room: 5/104		
09:45-10:30	Lecture: Introduction to	Joacim Rocklöv	
	climate-sensitive diseases and		
	modelling (45min)		
	Room: 5/104		
	Coffee break		
	Common Room (5 th floor)		
11:00-11:45	Lecture: Introduction to	Stella Dafka	
	climate science (45min)		
	Room: 5/104		
12:00-12:45	Presentation: Introduction to	Charles Hatfield	
	spatial data science for climate		
	data (45min)		
	Room: 5/104		
	Lunch		
	Common Room (5 th floor)		
14:00-17:00	Computer tutorial: Climate	Stella Dafka, Pratik Singh,	
	data &	Sumet Khumphairan, and	
	Coffee break (3h)	Munira Omar	
	Room: 5/104		
18:00-19:30	Reception		
	Common Room (5 th floor)		
Day 2 (24/9): Statistical models			
09:00-10:00	Lecture: Statistical methods I	Joacim Rocklöv	
	(60min)		
	Room: 5/104		
10:15-10:45	Presentation: Distributed Lag	Prasad Liyanage	
	Models (30min)		
	Room: 5/104		
	Coffee break		
	Common Room (5 th floor)		

11:15-12:15	Lecture: Statistical methods II	Jonas Walin		
	(60min)			
	Room: 5/104			
	Lunch			
	Common Room (5 th floor)			
13:15-16:15	Computer tutorial: Statistical	Jerome Baron, Pascale Stiles,		
	methods &	Prasad Liyanage, and Munira		
	Coffee break (3h)	Omar		
	Room: 5/104			
17:30-19:00	Social event:			
	Guided Tour of Altstadt			
	Heidelberg			
	Meeting point:			
	Löwenbrunnen at			
	Universitätsplatz			
Day	3 (25/9): Machine learning mo	odels		
09:00-10:00	Lecture: Machine learning	Michael Opata		
	methods I (60min)			
	Room: 5/104			
10:15-10:45	Presentation: Predicting Avian	Michael Opata		
	Influenza outbreaks in Europe			
	(30min)			
	Room: 5/104			
	Coffee break			
	Common Room (5 th floor)			
11:15-12:15	Lecture: Machine learning	Steffen Knoblauch		
	methods II (60min)			
	Room: 5/104			
	Lunch			
	Common Room (5 th floor)			
13:15-16:15	Computer tutorial: Machine	Michael Opata, Yichao Liu,		
	learning methods &	Peter Fransson, and Munira		
	Coffee break (3h)	Omar		
	Room: 5/104			
Day 4 (26/9): Process-based models				
09:00-10:00	Lecture: Process-based models	Åke Brännström		
	and methods I (60min)			
	Room: 5/104			
10:15-10:45	Presentation : Integration of	Julian Heidecke		
	climate-sensitivity in the			
	parameterization of process-			
	based models (30min)			
	Room: 5/104			
	Coffee break			
	Common Room (5 th floor)			
11:15-12:15	Lecture: Process-based models	Robert Scheichl		
	and methods II (60min)			
	Room: 5/104			
	Lunch			
	Common Room (5 th floor)			

13:15-16:15	Computer tutorial: Process-	Pratik Singh, Julian Heidecke,		
	based models and methods &	and Peter Fransson		
	Coffee break (3h)			
	Room: 5/104			
19:00	Social event:			
	Dinner at restaurant Rossini			
Day 5 (27/9): Process-based models cont. & Outlook				
09:00-09:45	Lecture: Process-based models	Robert Scheichl		
	and methods III (45min)			
	Room: 5/104			
10:00-10:45	Presentation: An interpretable	Peter Fransson		
	covariate compartmental			
	model for predicting the			
	spatio-temporal patterns of			
	dengue in Sri Lanka			
	Room: 5/104			
	Coffee break			
	Common Room (5 th floor)			
11:15-12:15	Pitches for EU + Closing	Joacim Rocklöv		
	(60min)			
	Room: 5/104			
12:15-13:15	Networking + Lunch			
	Common Room (5 th floor)			