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

Program

Time slot	Session	Instructors
Day 1: Introduction		
08:30-09:00	*Registration*	
09:00-09:45	Welcome and Official Opening. Introduction round and logistics of the applied modelling of climate-sensitive infectious disease summer course (45min)	**Michael Winckler and Joacim Rocklöv**
09:45-10:30	*Lecture:* Introduction to climate-sensitive diseases and modelling (45min)	**Joacim Rocklöv**
	Coffee break	
11:00-11:45	*Lecture:* Introduction to climate science (45min)	**Stella Dafka**
12:00-12:45	*Presentation:* Introduction to spatial data science for climate data (45min)	**Charles Hatfield**
	Lunch	
14:00-17:00	*Computer tutorial:* Climate data + **Coffee break** (3h)	**Stella Dafka, Pratik Singh, Sumet Khumphairan, and Munira Omar**
	Reception	
Day 2: Statistical models		
09:00-10:00	*Lecture:* Statistical methods I (60min)	**Joacim Rocklöv**
10:15-10:45	*Presentation:* Distributed Lag Models (30min)	**Prasad Liyanage**
	Coffee break	
11:15-12:15	*Lecture:* Statistical methods II (60min)	**Jonas Walin**
	Lunch	
13:15-16:15	*Computer tutorial:* Statistical methods + **Coffee break** (3h)	**Jerome Baron, Pascale Stiles, Prasad Liyanage, and Munira Omar**
Day 3: Machine learning models		
09:00-10:00	*Lecture:* Machine learning methods I (60min)	**Michael Opata**
10:15-10:45	*Presentation: Predicting Avian Influenza outbreaks in Europe* (30min)	**Michael Opata**

	Coffee break	
11:15-12:15	*Lecture:* Machine learning methods II (60min)	**Steffen Knoblauch**
	Lunch	
13:15-16:15	*Computer tutorial:* Machine learning methods + **Coffee break** (3h)	**Michael Opata, Yichao Liu, Peter Fransson, and Munira Omar**
	Social event	
Day 4: Process-based models		
09:00-10:00	*Lecture:* Process-based models and methods I (60min)	**Åke Brännström**
10:15-10:45	*Presentation:* Integration of climate-sensitivity in the parameterization of process-based models (30min)	**Julian Heidecke**
	Coffee break	
11:15-12:15	*Lecture:* Process-based models and methods II (60min)	**Robert Scheichl**
	Lunch	
13:15-16:15	*Computer tutorial:* Process-based models and methods + **Coffee break** (3h)	**Pratik Singh, Julian Heidecke, and Peter Fransson**
Day 5: Process-based models cont. & Outlook		
09:00-09:45	*Lecture:* Process-based models and methods III (45min)	**Robert Scheichl**
10:00-10:45	*Tutorial:* TBA	**Peter Fransson**
	Coffee break	
11:15-11:45	Pitches for EU + Closing (30min)	**Joacim Rocklöv**
11:45-13:15	Networking + Lunch	