

DAMES Schedule

Location:
Edmund-Siemers-Allee 1
Hauptgebäude
20146 Hamburg

	Monday 26th Sep.	Tuesday 27th Sep.	Wednesday 28th Sep.
	Chair: Valerio Lucarini	Chair: Christian Franzke	Chair: Johanna Baehr
Location	Lecture room M	Lecture room M	Lecture room M
9:00-9:45	Sonia Seneviratne Relating global climate forcing with regional changes in climate extremes	Laure Zanna „Ocean Turbulence: parametrizations, uncertainty and stochasticity“	Mickael Chekroun Data-adaptive harmonic decomposition and universal solutions to the data-driven closure problem
9:45-10:30	Sandra Chapman „Local and global perspectives on time series analysis of observed climate change“	Judith Berner „Stochastic Parameterization: Towards a New View of Weather and Climate Models“	Marc Bocquet „Efficient geophysical data assimilation - A Big Data challenge“
10:30-11:15	Coffee Break	Coffee Break	Coffee Break
	Chair: Cathy Hohenegger	Chair: Alberto Carrassi	Chair: Alberto Carrassi
Location	Lecture room M	Lecture room M	Lecture room M
11:15-12:00	Erik Chavez „Determining optimum climate drivers for weather risk projections“	Emilio Hernandez-Garcia „Network approaches to oceanic and atmospheric transport“	Francisco Doblas-Reyes „Drift in climate prediction and the need for a balanced initialisation“
12:00-13:20	Lunch	Lunch	Lunch
13:30-15:20	Parallel Sessions	Parallel Sessions	Parallel Sessions
15:20-15:50	Coffee Break	Coffee Break	Coffee Break
15:50-17:20	Parallel Sessions	Parallel Sessions	Parallel Sessions
17:30-19:00	Poster session		
19:00-22:00		Conference Dinner	

Monday 26 September

	Parallel 1 <i>THEME: Nonlinear Time Series Analysis I</i>	Parallel 2 <i>THEME: Environmental Risk Analysis and Sustainability I</i>
	Chair: Sebastian Schubert	Chair: Johanna Baehr
Location	Lecture room K	Lecture room M
13:20-13:50	Mikhail Kanevski	Jozef Syktus

	„Machine Learning of Complex Environmental Phenomena“	“More than carbon sequestration: Biophysical climate benefits of restored semi-arid woodlands”
13:50-14:20	Kira Rehfeld & Thomas Laepple “Towards an understanding of state- and timescale-dependent climate variability”	Sascha Hokamp & Mohammad Mohammadi Khabbazan “Decarbonizing the Global Economy: An Integrated Assessment of Low Carbon Emission Scenarios Proposed in Climate Policy”
14:20-14:50	Marie Schäffer “Hierarchical Clustering of Correlated Parameters for Analysis and Comparison of Datasets”	Grace Namata “Tropical agricultural systems vulnerability to weather variability”
14:50-15:20	Reik Donner “A climate network-based index to discriminate different types of El Niño and La Niña”	Andrej Ceglar “Linking crop yield anomalies to large-scale atmospheric variability over Europe”
BREAK		
	<i>THEME: Modeling of Extreme Events I</i>	<i>THEME: Nonlinear Time Series Analysis II</i>
	Chair: Alberto Carrassi	Chair: Reik Donner
Location	Lecture room K	Lecture room M
15:50-16:20	Deniz Bozkurt “Modeling an extreme precipitation event over the Atacama Desert: the impact of warmer eastern tropical Pacific SST”	Sebastian Bathiany & Vasilis Dakos & Marten Scheffer & Tim Lenton & Dirk Notz & Bregje van der Bolt & Egbert van Nes “Keeping an Eye on Changing Magnitude and Longevity of Climate anomalies”
16:20-16:50	Vera Melinda Galfi & Tamas Bodai & Valerio Lucarini “Convergence of the extreme events distributions	Jasper Franke “Dynamical regime shifts in the North Atlantic climate variability during the last 2 ka as revealed by terrestrial

	in a quasi-geostrophic atmospheric model for two different levels of chaos”	proxies”
16:50-17:20	Richard Blender “Correlated vorticity extremes as fractional Poisson processes”	Britta Aufgebauer & Michael Hauhs & Christina Bogner & Henning Meeseburg & Holger Lange “Detecting causal relationships among hydrochemical long-term monitoring data using Convergent Cross Mapping”

Tuesday 27 September

	Parallel 1 <i>Instabilities and Predictability</i>	Parallel 2 <i>THEME: Multi-Scale Effects and Stochastic Parameterizations I</i>
	Chair: Richard Blender	Chair: Christian Franzke
Location	Lecture room K	Lecture room M
13:20-13:50	Nikolaos Bakas “Emergence of coherent structures in a baroclinic quasi-geostrophic model”	Jorgen Frederiksen “Stochastic subgrid modelling for atmospheric, oceanic and boundary layer flows”
13:50-14:20	Valerio Lucarini & Tamas Bodai “Multistability of the Climate System and Melancholia States”	Etienne Mémin & V. Resseguier & P. Dérian & B. Chapron “Stochastic parameterization of geophysical flows through modelling under location uncertainty”
14:20-14:50	Marilena Oltmanns “How deep is the imprint of a warm summer over the subpolar North Atlantic?”	Jeroen Wouters & Georg Gottwald “Beyond infinite time scale separation: From Edgeworth expansions to subgrid-scale parametrizations”
14:50-15:20	Mikhail Dobrynin “Improved seasonal prediction of winter NAO through ensemble sub-sampling”	Gabriele Vissio & Valerio Lucarini “A direct derivation of a non-markovian stochastic parametrization for the

		Lorenz-96 model”
BREAK		
	<i>THEME: Modeling of Extreme Events II</i>	<i>THEME: Environmental Risk Analysis and Sustainability II</i>
	Chair: Melinda Galfi	Chair: Cathy Hohenegger
Location	Lecture room K	Lecture room M
15:50-16:20	Giedrius Kaveckis “Three pathways of future urban heat impact in Greater Hamburg: the effects of extreme urban development scenarios”	Sandra Mujjimba “The Effect of Climate Change Adaptation on Rural Community Livelihoods”
16:20-16:50	Maida Zahid & Valerio Lucarini & Richard Blender “Estimation of daily maximum temperature and wet-bulb temperature extremes in southern Pakistan”	Benjamin Blanz “Modelling ecosystem Economy Interaction Dynamics”
16:50-17:20	Frank Kwasniok “Detecting, anticipating and predicting critical transitions using data-driven non-stationary dynamical modelling”	Markus Kilian & Erik Chavez & Valerio Lucarini “Impact of land use change in Brazil on the regional weather and climate system”

Wednesday 28 September

	Parallel 1 <i>THEME: Stochastic and Dynamical Systems Approaches I</i>	Parallel 2 <i>THEME: Data Assimilation and Big Data</i>
	Chair: Valerio Lucarini	Chair: Johanna Baehr
Location	Lecture room K	Lecture room M
13:20-13:50	Georg Gottwald & John Wormell & Jeroen Wouters “On spurious detection of linear response and misuse of the fluctuation-dissipation theorem in finite time series”	Balu Nadiga “Bayesian Analysis of Earth System Models and Observations”
13:50-14:20	Nick Watkins	Juan M. López

	“Fact versus formula in the power spectra of complex systems”	“Data Assimilation by delay-coordinate nudging”
14:20-14:50	Giovanni Conti “Path integral, Fokker-Planck equation and transition matrices in climate dynamics”	Francois Counillon “Flow dependent assimilation of SST in isopycnal coordinate with the Norwegian Climate Prediction Model”
14:50-15:20	Shaun Lovejoy “Harnessing butterflies for improved monthly, seasonal, and interannual forecasts”	Alberto Carrassi “Estimating model evidence using data assimilation”
BREAK		
	<i>THEME: Multi-Scale Effects and Stochastic Parameterizations II</i>	<i>THEME: Stochastic and Dynamical Systems Approaches II</i>
	Chair: Valerio Lucarini	Chair: Melinda Galfi
Location	Lecture room K	Lecture room M
15:50-16:20	Mirjana Sakradzija “A stochastic ensemble model as a scale-aware parameterization of shallow convection”	Waheed Iqbal “Circulation regimes and unstable periodic orbits from a three layer quasi geostrophic model”
16:20-16:50	Abdel Hannachi “Combining intermittency, autoregression and censoring to model daily precipitation”	Andrey Gritsun & Valerio Lucarini “Atmospheric model subjected to external forcing: response, unstable periodic orbits, and the fluctuation-dissipation theorem”
16:50-17:20	Nick Verheul “Data-driven stochastic parameterizations of ocean mesoscale eddy forcing”	Christian Franzke “Predictability of Extremes in Stochastic-Dynamic Climate Models”

Posters:

1. Anoruo Chukwuma Moses: An intensive two-week study of CO₂ and RH fluxes in urban city of Owerri, Nigeria
2. Leonel Lara: Inferring missing climate data for agricultural planning using Bayesian networks
3. Mohammad Mahdi Khatib: Active fault plane modeling by numerical analysis
4. Jasper Franke: Functional paleoclimate networks of North Atlantic terrestrial proxies: A new tool for studying spatio-temporal climate variability within the Arctic 2k framework
5. Frank Kwasniok: Regime-dependent modelling of extremes in the extratropical atmospheric circulation
6. Frank Kwasniok: Modelling large-scale atmospheric flow using a mixture of local linear empirical models
7. Luís Melo Margalho: Spatio-temporal modelling of environmental data from monitoring stations
8. Rula Tabbash: North Atlantic meridional and horizontal streamfunctions in different versions of MiKlip Prediction System
9. Leonard Borchert: Interannual Variability and Predictability of AMOC and Surface Temperatures in the North Atlantic
10. H. Pohlmann: Partly coupled data assimilation in MPI-ESM
11. Sebastian Brune: Evolution of initialized hindcasts in the global coupled climate model MPI-ESM with respect to the free model and to observations
12. Tobias Weber: Estimating the effect of SMART cables on ocean modelling by data assimilation
13. Mukiibi Daniel: Three dimensional chaotic advection by mixed layer baroclinic instabilities
14. Marwa Tifafi: Large differences in global and regional soil carbon stock estimated by different products : intercomparison and evaluation with field measurements
15. Kuei-Hua Hsu: Global Climatology of Wind Power
16. Kevin Niklas Wiegand: Multi-year predictability of upper ocean heat content and sea surface temperature in an MPI-ESM hindcast ensemble initialized by an oceanic EnKF
17. Guannan Hu: Data Assimilation in a Fast-slow System of the Atmosphere
18. Hezron Awiti: Investigating the Homogeneity of Monthly Rainfall Records in Kenya
19. Georgios Fragkoulidis: The connection between Northern Hemisphere heat waves and large-amplitude quasi-stationary Rossby wave packets
20. Sahra Osima: How well do CORDEX-Africa models reproduce observed extreme rainfall events in East Africa?
21. Salami Tairu: Variability of climatic elements in Nigeria over recent 100 years
22. André Düsterhus: Seasonal predictability of the Summer North Atlantic Oscillation in the MPI-ESM seasonal prediction system
23. Gualtiero Badin: A study of surface semi-geostrophic turbulence
24. Karsten Peters: Stochastic elements in ECHAM6.3s convection parameterization and their effects on simulated tropical intra-seasonal variability
25. Martin Pieroth: Towards a climate dependent subgrid-scale parameterization in a three-layer quasi-geostrophic model
26. Matthias Zacharuk: Towards local stochastic SGS modeling of one dimensional shallow water dynamics
27. Mohammad Mahdi Khatib: Active fault plane modeling by numerical analysis
28. Nina Kargapolova: Stochastic weather generator based on non-linear transformations of Gaussian processes
29. Michael Matiu: Spatiotemporal variations of climate, snow and vegetation in an Alpine region

30. Peter Landschützer: Decadal variability and trends in the global ocean carbon sink inferred from a neural network-based upscaling of in-situ pCO₂ observations
31. Jérôme Pernin : Mixture model-based atmospheric air mass classification: A probabilistic view of thermodynamic profiles
32. Jozef Syktus: High-resolution climate change downscaling over Queensland region
33. Muhammad Abid: Climate change adaptation to sustain local food security; a farmers? perspective from Pakistan
34. Sherdon Niño Uy: Downscaling Method for Wind Resource Assessment on Urban Areas in the Philippines
35. Raunaq Jahan: Variability of temperature at 12 selected stations in Bangladesh between 1948-1979 and 1980-2011
36. Maxi Mbidde Ssenyondo: Disaster risk reduction efforts and factors affecting flood disaster management: A case study of Katakwi district-Olupe and Ngariam Camps.
37. Skyler Jayden Dembe: Climatic change adaptation amidst other environmental hazards
38. Syed Rezwan Kabir: Artificial Neural Network modelling approach for predicting river flows under future climate change scenarios
39. Brent Giggins: Optimising the Breeding Method to enhance Ensemble Forecasts in Multi-Scale Systems
40. Govardhan Dandu: Understanding the Revival of the Indian Summer Monsoon after Breaks
41. Vimal Koul: Impact of Ocean Initial Conditions on Seasonal Prediction of Indian Summer Monsoon
42. Karsten Peters: Data-driven stochastic subgrid-scale parameterisation for tropical Convection