Pre-Conference Policy Workshop: August 15, 2024

16:00-18:00  Too Hot to Think Straight, Too Cold to Panic: Landing the Economic Case for Climate Action with Decision-makers
Chair: Esfandiar Maasoumi (Emory University)

Despite a clear economic case for climate action, global climate action is still insufficient. BCG, a leading global strategy consulting firm that encourages and supports governments, businesses and investors to accelerate climate action, has been working with the Cambridge climaTRACES Lab on presenting the economic case for climate action to decision-makers based on the growing body of economic research. Edmond Rhys Jones (BCG’s lead for climate policy and diplomacy) and Sahradha Kaemmerer (project lead) will present the main finding from this research (which will be published ahead of New York Climate Week). The presentation will be followed by a roundtable discussion on the most effective policy levers to incorporate tomorrow’s costs into today’s decisions.

18:00-19:00  Drinks Reception and Networking

19:00-21:00  Dinner (by invitation only)

Day One: August 16, 2024

08:30-09:00  Registration Open (Tea, coffee and freshly baked sweet treats)

09:00-09:10  Welcome
Kamiar Mohaddes, Marina Friedrich, Eric Hillebrand

09:10-10:40  Session 1: Nonlinear Effects in Reduced-complexity and Statistical Climate Models
Chair: Tommaso Proietti (Università di Roma ‘Tor Vergata’)

Locating the start of trend breaks in sea level by indicator saturation, David Hendry (University of Oxford)
FaIR-calibrate v1.4.1: Calibration, constraining and validation of the FaIR simple climate model, **Chris Smith** (University of Leeds)

Polar Amplification Helps Forecast Northern Temperature Anomalies, **Zack Miller** (University of Missouri)

**10:40-11:00** Coffee Break + Poster Session

**11:00-12:30** Session 2: Emissions and the Social Cost of Carbon
Chair: Cathy Yi-Hsuan Chen (University of Glasgow)

Meta-emulation: An application to the social cost of carbon, **Richard SJ Tol** (University of Sussex)

Building an Open Source Empirical Macro Model (OSEM) to Forecast Carbon Emissions, **Moritz Schwarz** (TU Berlin and PIK Potsdam)

Intermittency and the potential of wind energy for CO2 abatement, **Bent Jesper Christensen** (Aarhus University)

**12:30-13:30** Lunch + Poster Sessions

**13:30-15:00** Session 3: Emissions and Temperatures
Chair: Edmond Rhys Jones (Boston Consulting Group)

On the industrial origins of aggregate emission reduction: Evidence from a dynamic factor model, **Fulvia Marotta** (University of Oxford and De Nederlandsche Bank)

The story of 1.5C: Obtaining the probability of breaching the goals of the Paris Agreement using statistical models with long memory dynamics, **Eduardo Vera-Valdes** (Aalborg University)

Forecasting the atmospheric ethane burden above the Jungfraujoch with frequentist and Bayesian methods, **Marina Friedrich** (Vrije Universiteit Amsterdam)

**15:00-15:50** King’s Archives Exhibition (Wine Room) + Poster Sessions (Chetwynd Room)

**15:50-17:20** Session 4: Temperatures I
Chair: Patrycja Klusak (Heriot-Watt University)

Full identification and estimation of a two-component energy balance model as a cointegrated VAR, **Matthias Wirth** (University of Hohenheim)

An unconditional-quantile vector error correction model to analyze climate heterogeneity, **Andrey Ramos** (Carlos III University of Madrid)

Testing extreme warming and geographical heterogeneity, **Lola Gadea** (University of Zaragoza)

**17:20-17:40** Coffee Break
17:40-18:40  **Session 5: Temperatures II**  
Chair: M Hashem Pesaran (University of Cambridge and USC)  

Modelling temperature persistence using seasonal quantile autoregressions and shifts in the North Atlantic Oscillation, **Barend Spanjers** (Vrije Universiteit Amsterdam)  

Grouped Trends in the In-Situ and Free-Air Temperature Offset, **Paul Haimerl** (Maastricht University)  

19:00-22.00  Pre-dinner Drinks (19.00) followed by Dinner (19.30) in King's College Hall  
By invitation only  

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**Day Two: August 17, 2024**  

08:30-09:00  Tea, coffee and freshly baked sweet treats  

09:00-10:30  **Session 6: Advances in Climate Time Series Models**  
Chair: Matthew Agarwala (University of Sussex)  

The dynamic torus: with an application to wind and wave direction in the Adriatic, **Andrew Harvey** (University of Cambridge)  

Spectral-based variable selection of high-dimensional data for prediction of the ENSO, **Alessandro Giovannelli** (University of L'Aquila)  

An observation-driven generalized Poisson model, **Dario Palumbo** (Ca' Foscari University of Venice and University of Cambridge)  

10:30-11:00  **Coffee Break + Poster Session**  

11:00-13:00  **Session 7: Economic Growth and Climate Change**  
Chair: Jamie Males (PLOS Climate)  

Fully modified OLS estimation and inference for seemingly unrelated cointegrating polynomial regressions with common integrated regressors, **Martin Wagner** (University of Klagenfurt and Bank of Slovenia)  

Climate change and economic performance in the short-run and the long-run, **Hamid Mohtadi** (University of Wisconsin-Milwaukee and World Bank)  

Climate Growth-at-Risk, **Damiano DiFrancesco** (Sant’Anna School of Advanced Studies)  

Rising temperatures, melting incomes: Country-specific macroeconomic effects of climate scenarios, **Mehdi Raissi** (International Monetary Fund)  

13:00-14:30  **Lunch + Poster Session**
14:30-15:30  **Session 8: Analysis of Paleoclimate Time Series**  
Chair: Mikkel Bennedsen (Aarhus University)

Continuous-time state space methods for Delta-O-18 and Delta-C-13, **Kathrine By Larsen** (Aarhus University)

Common persistent cycles, **Vasco Gabriel** (University of Victoria)

15:30-17:00  **Session 9: Impacts**  
Chair: Marina Friedrich (VU Amsterdam)

Measuring, modelling, and forecasting heat discomfort, day and night, **Frank Diebold** (University of Pennsylvania)

Mitigating climate change at the firm level: Mind the laggards, **German Villegas Bauer** (International Monetary Fund)

Natural disasters, insurance claims, and regional housing markets, **Bjørnar Karlsen Kivedal** (Østfold University College)

17:00-17:30  **Coffee Break + Poster Session**

17:30-18:30  **Session 10: Climate Finance**  
Chair: Eric Hillebrand (Aarhus University)

Dynamic time-varying betas and climate and political risk factors for the four largest Australian banks, **Timo Teräsvirta** (Aarhus University)

Climate Change and Sovereign Credit Ratings, **Matt Burke** (University of Oxford)

18:30-18:45  **Closing Remarks**  
Kamiar Mohaddes, Eric Hillebrand

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**Poster presentations**

- Estimating the elasticity of emission intensity for 10 major pollutants, **Kumar Aniket** (University College London)

- Long-range dependence parameter estimation for mixed-spectra Gaussian processes, **Lenin Arango-Castillo** (Bank of Mexico)

- The nature of causation between radiative forcing and temperatures, **Arnab Bhattacharjee** (Heriot-Watt University and National Institute of Economic & Social Research)

- Physical climate risks, sovereign credit ratings, and the benefits of adaption, **Matt Burke** (University of Oxford)
Extreme dry spells and larger storms in the U.S. Midwest raise crop prices, **Magdalena Cornejo** (Universidad Torcuato Di Tella)

The heterogeneous impacts of firm upgrading on energy use: Evidence from Lithuania, **Mustapha Douch** (University of Edinburgh)

Shifting gears? The impact of Austria’s transport policy mix on CO2 emissions from passenger cars, **Tobias Eibinger** (University of Graz)

Seasonal temperatures and economic growth in the UK, **Lotanna Emediegwu** (Manchester Metropolitan University)

The Global Carbon Budget as a cointegrated system, **Eric Hillebrand** (Aarhus University)

A statistical dynamic periodic model for Arctic sea ice projections, **Siem Jan Koopman** (Vrije Universiteit Amsterdam)

Quantifying vulnerability to crop yields in India to weather extremes, **Kedar Kulkani** (Azim Premji University)

Who values ESG more: Retail or institutional investors?, **Chaojie Liu** (University of Bristol)

Efficient semiparametric estimation of European climate policy effects, **Massimiliano Mazzanti** (University of Ferrara & SEEDS)

Financing the flooded cities: Climate risks and local government’s fiscal cost, **Lina Meng** (University of Wisconsin-Madison; Xiamen University)

Reducing gender inequality in education helps mitigate climate change **Zhifu Mi** (University College London)

Adverse selection in the African index-based insurance market, **Adriano Morales** (ITC - University of Twente)

Temperature and growth: Seasonal and non-linear effects using NUTS2 data, **Fabio Parla** (University of Palermo)

Climate shocks and climate risk in European equities, **Fabio Parla** (University of Palermo)

Climate change: across time and frequencies, **Anthoulla Phella** (University of Glasgow)

Carbon emissions and the transmission of monetary policy, **Jose Nicolas Rosas** (Universitat Pompeu Fabra)

Assessing climate sensitivity with quasi-cointegration, **Jerome Simons** (University of Cambridge)

Unveiling dynamics in climate disaster information connectivity across regions: A variance decomposition network approach, **Yilan Xu** (University of Illinois at Urbana-Champaign)