

EC² Conference: Econometrics of Climate, Energy, and Resources

December 10 and 11, 2021

Program

Friday, December 10, 2021

8.00-8.10 *Welcome by Eric Hillebrand, Richard Tol, and Frank Kleiberger*

8.10-9.00 *Keynote 1: ET Lecture (supported by “Econometric Theory”)*

Christiane Baumeister: Advances in Using Vector Autoregressions to Estimate Structural Magnitudes

9.00-10.00 *Econometric Models of Climate Data: Three 20-minute presentations, Session chair: **Siem Jan Koopman***

Marina Friedrich, **Luca Margaritella**, Stephan Smeekes: High-Dimensional Causality for Climatic Attribution

Hanno Reuvers, Etienne Wijler: Sparse Generalized Yule-Walker Estimation for Large Spatio-Temporal Autoregressions with an Application to NO₂ Satellite Data

Mikkel Bennedsen, Eric Hillebrand, **Siem Jan Koopman:** A Statistical Model of the Global Carbon Budget

10.00-10.30 *Coffee break (30 minutes)*

10.30-11.10 *Climate Finance; Damages, Pollution, and Disasters: Four 10-minute presentations, Session chair: **Nelson Mark***

Jochen Güntner, Peter Öhlinger: Oil Price Shocks and the Hedging Benefits of Airline Investments

Xander Hut, Mathijs Cosemans, Mathijs van Dijk: Climate Change and Long-Horizon Portfolio Choice: Combining Theory and Empirics

Fulvia Marotta, Matteo Ciccarelli: Demand or Supply? An Empirical Exploration of the Effects of Climate Change on the Macroeconomy

Nelson Mark, Kimberly Berg, Chadwick Curtis: GDP and Temperature: Evidence on Cross-Country Response Heterogeneity

11.10-12.10 *Macroeconomics of Emissions, Climate Finance: Three 20-minute presentations, Session chair: **Hyeyoon Jung***

Diego Känzig: The Unequal Consequences of Carbon Pricing

Soojin Jo, Lilia Karnizova: Energy Efficiency and Fluctuations in CO₂ Emissions

Hyeyoon Jung, Robert Engle, Richard Berner: Climate Stress Testing

12.10-13.10 Lunch break (1 hour)

13.10-14.00 Poster Session I: Climate Finance; Damages, Pollution, and Disasters; Econometric Models of Climate Data, Session chair: **Eric Hillebrand**

Biao Yang: Explaining Greenium in a Macro-Finance Integrated Assessment Model <https://www.dropbox.com/s/zi51gqgjw4ke6v4/5-min%20presentation.mp4?dl=0>

David Ardia, Keven Bluteau, Kris Boudt, Koen Ingelbrecht: Climate Change Concerns and the Performance of Brown versus Green Stocks <https://www.dropbox.com/s/u8cu2gtkhui7q3i/Ardia.mp4?dl=0>

Emanuele Chini, Miroc Rubin: Time-Varying Environmental Betas and Latent Factors of US Individual Stocks <https://www.youtube.com/watch?v=COiNrRZeQUU>

Anson Ho, Kim Huynh, David Jacho-Chavez, Genevieve Vallee: We Didn't Start the Fire! The Effects of Natural Disasters on Consumer Financial Distress https://www.dropbox.com/s/1ae3tpm2esounco/Ho_Huynh_Chavez_Valle_EC2.mp4?dl=0

Thomas Leirvik, **Menghan Yuan:** Heterogeneity in the Effects of Climate Change on Soybean Yields <https://drive.google.com/file/d/1sJOzqnyBj7sQ4E4t0Za5NpjL5aRnmn6K/view>

Mikkel Bennedsen, Eric Hillebrand, **Jingying Zhou-Lykke:** A State Space Representation of a Two-Component Energy Balance Model <https://www.youtube.com/watch?v=n33AtijvMdo>

14.00-14.40 Econometric Models of Climate Data, Fuel Mix and Energy Prices: Two 20-minute presentations, Session chair: **Pragyan Deb**

Yoosoon Chang, Yongok Choi, Chang Sik Kim, **Isaac Miller,** Joon Park: Common Factors and Heterogeneity in Long-Run Energy Demand: A Functional Coefficient Panel Approach

Pragyan Deb, Davide Furceri, Jonathan Ostry, Nour Tawk: Creative Destruction During Crises: An Opportunity for a Cleaner Energy Mix

14.40-15.40 Damages, Pollution, and Disasters; Econometric Models of Climate Data: Six 10-minute presentations, Session chair: **Sebastian Jensen**

Fernanda Valente, Marcio Laurini: The Dynamics of Fire Activity in the Brazilian Pantanal

Changli He, Jian Kang, Annastiina Silvennoinen, **Timo Teräsvirta:** Long Monthly Temperature Series and the Vector Seasonal Mean and Covariance Autoregressive Model

Francesco Giancaterini, Alain Hecq, Claudio Morana: Is Global Warming (Time) Reversible?

Tommaso Proietti, Federico Maddanu: Modelling Cycles in Climate Series: The Fractional Sinusoidal Waveform Process

Andrew Harvey, **Jerome Simons:** Orbital Forcing of Ice Age Cycles

Mikkel Bennedsen, Eric Hillebrand, **Sebastian Jensen**: A Neural Network Approach to the Environmental Kuznets Curve

15.40-16.00 *Coffee break (20 minutes)*

16.00-16.50 *Keynote 2*

Tatyana Deryugina: Accounting for Adaptation in Predicting Climate Change Damage

Saturday, December 11, 2021

9.00-9.50 *Keynote 3*

Hilde Bjørnland: The Price Responsiveness of Shale Producers: Evidence from Micro Data

9.50-10.20 *Coffee break (30 minutes)*

10.20-11.00 *Macroeconomic of Emissions, Climate Finance: Two 20-minute presentations, Session chair: **Susana Campos-Martins***

Nicolas Koch, Lennard Naumann, Felix Pretis, Nolan Ritter, Moritz Schwartz: What Reduces CO₂ Road Emissions? Policy Attribution Using Break Detection

Susana Campos-Martins, David Hendry: Geoclimate, Geopolitics, and the Geovolatility of Carbon-Intensive Equity Returns

11.00-12.00 *Fuel Mix, Energy Prices, Macroeconomics of Emissions: Six 10-minute presentations, Session chair: **Bent Jesper Christensen***

Marica Valente: Heterogeneous Effects of Waste Pricing Policies

Marina Friedrich, Yicong Lin: Bootstrap Simultaneous Confidence Bands for Time-Varying Coefficient Models

Franziska Dorn, Simone Maxand, Thomas Kneib: The Nonlinear Dependence of Income Inequality and Carbon Emissions: Potentials for a Sustainable Future

Guillaume Chevillon, Takamitsu Kurita: What Does it Take to Control Global Temperatures? Prospective and Counterfactual Carbon Abatement Policies in a Cointegrated Vector Autoregressive Model

Fabian Knorre, Martin Wagner: Nonparametric Cointegration Analysis of the Environmental Kuznets Curves for Carbon and Sulfur Dioxide Emissions

Federico Carlini, **Bent Jesper Christensen**, Nabanita Datta Gupta, Paolo Santucci de Magistris: The Impact of Climate, Intermittency and Demand on the Potential of Wind Energy for CO₂ Abatement

12.00-13.00 *Lunch break (1 hour)*

13.00-13.50 *Poster Session 2: Fuel Mix and Energy Prices; Macroeconomics of Emissions, Session chair: **Mikkel Bennedsen***

Amor Aniss Benmoussa, Reinhard Ellwanger, **Stephen Snudden**: The New Benchmark for Forecasts of the Real Price of Crude Oil
https://www.youtube.com/watch?v=gW_MC6Vg05A

Christoph Schult: Is Risk the Fuel of the Business Cycle?
<https://1drv.ms/v/s!Aud4eELOkyw6jLsfBcJ-qwKyUdr-lQ?e=Afpxyl>

Massimiliano Caporin, **Michele Costola**: Time-Varying Granger Causality Tests for Applications in Global Crude Oil Markets: A Study on the DCC-MGARCH Hong Test

<https://www.youtube.com/watch?v=xGuDEk9NBU4>

Simone Maxand: A Panel SVAR for European Climate Policy

https://smaxand.github.io/psvar_ctax_maxand.mp4

Kevin Macdonald, **Harry Patrinos**: Education Quality, Green Technology and the Economic Impact of Carbon Pricing

<https://www.youtube.com/watch?v=XGN8uJjTmiA>

Doa Bilgin, **Reinhard Ellwanger**: A Simple Model of Global Fuel Consumption <https://www.youtube.com/watch?v=qOr4sA4pohQ>

13.50-14.40 *Keynote 4*

Mar Reguant: The Distributional Impacts of Real-Time Pricing

14.40-15.00 *Coffee break (20 minutes)*

15.00-16.00 *Damages, Pollution, and Disasters: Three 20-minute presentations, Session chair: **Marinella Davide***

Sylvain Chabe-Ferret, Arnaud Reynaud, Eva Tene: Water Quality, Policy Diffusion Effects, and Farmers' Behavior

Hee Soo Kim, **Christian Matthes**, Toan Phan: Extreme Weather and the Macroeconomy

Marinella Davide, Joseph Aldy, Enrica De Cian: Temperature and Energy Price's Impact on Mortality in European Cities

16.00 *Closing remarks: Eric Hillebrand, Richard Tol, Frank Kleiberger*

Sponsors:

Econometric Theory

European Central Bank

Danmarks Nationalbank

