

## 9<sup>th</sup> Conference on Econometric Models of Climate Change (EMCC)

August 27–28, 2025

Hotel Grand Pacific, Victoria, British Columbia

University of Victoria

### Conference Programme (as of August 26, 2025)

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#### Day 1 – August 27, 2025

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**08:00 – 8:40**    **Registration Open – Hotel Grand Pacific, Vancouver Island Ballroom**

**08:40-09:00**    **Welcome**

**09:00-10:20**    **Session 1: Advances in Climate Time Series Models**

**Chair:** Paul Haimerl

Modeling the Evolving Patterns of Global Temperature Anomaly Distributions

**Kevin J. Lansing** (Federal Reserve Bank of San Francisco)

Estimation and Inference for Systems of Multi-Factor Production Functions: Modelling the Joint Behavior of GDP and Emissions

**Martin Wagner** (University of Klagenfurt and Institute for Advanced Studies)

Modelling the Global Carbon Budget: A Time-Varying Cointegration Approach to Carbon Sink Saturation

**Matthias Wirth** (University of Hohenheim)

The stability of global CO<sub>2</sub> sinks: A nonlinear cointegration approach

**Paul Haimerl** (Aarhus University), Mikkel Bennedsen, Eric Hillebrand, Morten Ørregaard Nielsen

**10:20-11:00**    **Coffee Break**

**11:00-12:20**    **Session 2: Adapting Agriculture**

**Chair:** Martin Paul Tabe-Ojong

Changing crop sensitivity to extreme dry and hot conditions in the US corn belt

**Marina Friedrich** (VU Amsterdam), Raed Hamed, Rick van Gelling

Evolving the EU's Food System towards Climate Resilience

**Kevin Schneider** (European Commission DG Joint Research Centre)

Offsetting the Impact of Climate Change on Food Production through Adaptation

**Magdalena Cornejo** (Univ. Torcuato Di Tella), Hildegart Ahumada, Lucia Freira

Adapting to Climate Change: Droughts and Livestock Commercialization

**Martin Paul Tabe-Ojong** (World Bank), Ange Kakpo

**12:20-13:40 Lunch (Hotel Grand Pacific)**

**13:40-15:00 Session 3: Spotlight Talks I**  
**Chair:** Eduardo Vera-Valdes

Weather Shocks, Workfare, and the Farmer Suicide Crisis in India  
**Prashikdivya (Prashik) Gajbhiye** (University of Massachusetts Amherst)

Deep ReQU Mode-Informed Learning for Global Temperature Forecasting  
**Tao Wang** (University of Victoria), Vasco Gabriel

A Monte Carlo Study of Super Saturation for Detecting Outliers and Location Shifts  
**Jonas Kurle** (University of Oxford)

Which Policies Reduce Residential Emissions? Evidence From Agnostically Detected Reductions in the US  
**Yin Shi** (University of Victoria), Jack Forgrave, Felix Pretis

The Impact of Temperature and Precipitation on Home Insurance Claims: Evidence from British Columbia  
**Matt Marcoux** (University of Victoria), Felix Pretis

Global Warming Acceleration in a Globe with Long Memory  
**Eduardo Vera-Valdes** (Aalborg University)

**15:00-15:40 Coffee Break**

**15:40-17:20 Session 4: Extreme Weather, Disasters, and Macroeconomy**  
**Chair:** Fulvia Marotta

Extreme Weather in Europe: Determinants and Economic Impact  
**Claudio Morana** (University of Milano-Bicocca), Marcelle Chauvet, Murilo Silva

Unveiling Climate Disaster Information Transmission Across Regions: A Variance Decomposition Network Approach  
**Yilan Xu** (University of Illinois at Urbana Champaign), Siqi Zheng, Zhentao Shi, Yi Huang, Yichun Fan, Sebastien Box-Couillard

Extreme Weather and Extreme Values  
**Marc Gronwald** (Xi'an Jiaotong-Liverpool University), Sania Wadud, Xin Jin

Identifying climate-vulnerable populations using satellite imagery  
**Jonathan Proctor** (UBC), Solomon Hsiang, Luke Sherman, Jeanette Tseng

Commitment vs Credibility: Macro Effects of Climate Policy Uncertainty Concerns  
**Fulvia Marotta** (De Nederlandsche Bank and University of Oxford), Maria Sole Pagliari and Jasper de Winter

**17:20 End of Day 1**

**18:00 – 19:00** Harbour Ferry from Coast Harbourside Marina to Flying Otter Restaurant

**19:00-late** Conference Dinner at the Flying Otter Restaurant

## Day 2 – August 28, 2025

### 08:40-10:20 **Session 5: Energy and Emissions**

**Chair:** Robert Kaufmann

From Sensitivity Analysis to Monte Carlo Simulations: Uncertainty Estimation of GHG Emission Projection with a Large Energy-Emissions Model

**Matthew Lewis** (Environment and Climate Change Canada), Cheng-Marshal Wang, Richard Laferriere

Labor Lock-in in the Fossil Fuel Industry

**Katherine Wagner** (University of British Columbia), Patrick Baylis, Eva Lyubich

Multi-Scale Land Use Impacts on Fossil Fuel-Related CO<sub>2</sub> Emissions in the United States

**Jason Hawkins** (University of Calgary)

Two Decades On: Assessing the Impact of the Copenhagen Criteria on Greenhouse Gas Emissions in the 2004 EU Accession Countries

**Alessandra Canepa** (University of Turin)

Estimates for Anthropogenic Carbon Emissions Due to Changes in Land Cover/Land use are not Accurate and Obfuscate Increases in the Airborne Fraction

**Robert Kaufmann** (Boston University)

### 10:20-11:00 **Coffee break**

### 11:00-12:20 **Session 6: Advances in Climate Time Series Models II & Paleoclimate**

**Chair:** Olivia Kvist

Understanding Wind Extremes in North America: A Data-Driven Approach to Pacific SST Influence

**Ameneh Mollasharifi Targhi** (University of Victoria), Adam Monahan

A state-space approach to breakpoint detection with an application to paleoclimate data

**Kathrine By Larsen** (Aarhus University)

Identifying trends and breaks in climatologic time series under unknown heterogeneity and dependence

**Fritsch Markus** (University of Passau), Harry Haupt

Cointegration By Parts: Is There a Breaking Point in Temperature Anomalies?

**Olivia Kvist** (Aalborg University), J. Eduardo Vera-Valdes

### 12:20-13:40 **Lunch (Hotel Grand Pacific)**

### 13:40-14:40 **Session 7: Spotlight Talks II**

**Chair:** Moritz Schwarz

From Shine to Decline: Analysis of Power Loss Rate of Photovoltaic Systems in Germany

**Diego Alejandro Prieto Melo** (Energy Innovation Center - BTU Cottbus-Senftenberg),  
Christin Hoffmann, Iain Staffell, and Felix Müsgens

Environmental Trade-offs in the Informal Sector: Evidence from G7 Countries on Shadow Economy, Green Taxes, and Innovation

**Imran Ali Khan** (Birmingham City University), Sami Rahman, Muhammad Bilal Mustafa, Shaukat Mehsud, Muhammad Umar

Assessing the Impact of Climate Change and Heat Mitigation Strategies on Urban Temperature Patterns and Populations Exposure to Heat Stress in Coastal Cities

**Forood Azargoshasbi** (University of Victoria), Laura Minet

Evaluating the effects of net-zero scenarios on the Earth system

**Geoffrey Harper** (University of Victoria, Simon Fraser University), Kirsten Zickfeld

Geological net zero and its implications for climate policy

**Andrew Weaver** (University of Victoria)

statIAM: Building a statistical emulator for Integrated Assessment Models

**Moritz Schwarz** (Potsdam Institute of Climate Impact Research)

**14:40-15:10 Coffee break + Group Photo**

**15:10-15:50 Session 8: Finance, Macroeconomy, and Climate Change I**

**Chair:** Rasmus Lönn

Testing econometric climate-response methods using the land biosphere in climate models

**Ken Caldeira** (Stanford / Gates Ventures), Juan Moreno Cruz, Lei Duan

Credit risk in the face of climate change and transition policies

**Rasmus Lönn** (Erasmus University Rotterdam), Matthijs Leegstra, Erik Kole

**15:50-16:00 Short break**

**16:00-16:40 Session 9: Finance, Macroeconomy, and Climate Change II**

**Chair:** Lola Gadea

Canada's Consumer Carbon Tax Response: Macroeconomic Agent-based Model Ex-post Calibration and Ex-ante Forecasting

**Luke Stern** (University of Victoria), Deven Azevedo, Reetik Sahu, Jonas Kraasch, Zachary Gould, José Moran, Madeleine McPherson, Katya Rhodes

Macroeconomic Effects of Temperature Distributional Shocks

**Maria Dolores Gadea Rivas (Lola Gadea)** (University of Zaragoza), Jesus Gonzalo, Andrey Ramos

**16:40-16:50 Closing remarks**

**17:00 End of Conference**

## EMCC 2025 Local Organisers

- Felix Pretis (University of Victoria)
- Parker Little (University of Victoria)
- Yin Shi (University of Victoria)

## EMCC Board

- [Marina Friedrich](#) (Vrije Universiteit Amsterdam)
- [Eric Hillebrand](#) (Aarhus Universitet)
- [Felix Pretis](#) (University of Victoria)
- [Tommaso Proietti](#) (U. degli Studi di Roma “Tor Vergata”)

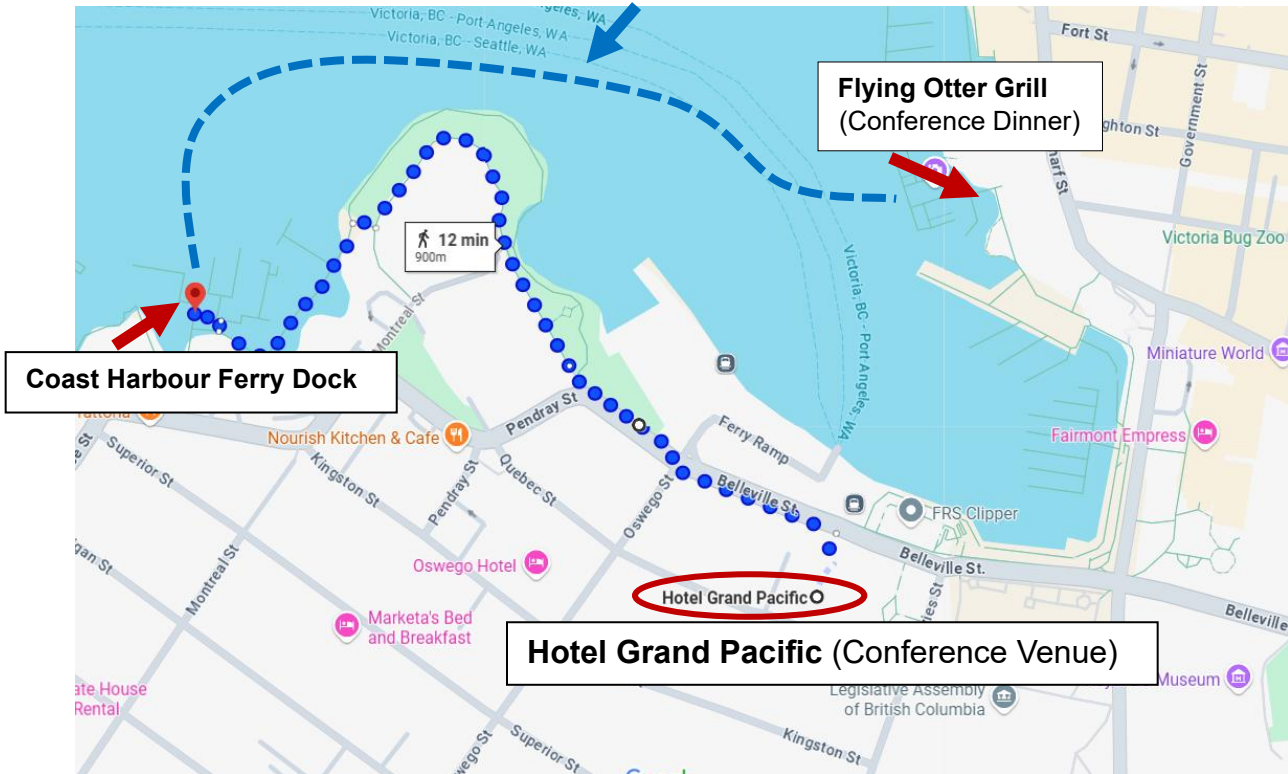
## Acknowledgements

We acknowledge and respect the Ləkʷəŋən (Songhees and Xʷsepsəm/Esquimalt) Peoples on whose territory the University of Victoria stands, and the Ləkʷəŋən and ƵSÁNEĆ Peoples whose historical relationships with the land continue to this day.

We thank the Pacific Institute for Climate Solutions, the Social Science and Humanities Research Council (SSHRC) of Canada, UVic’s Climate Connector, the UVic Department of Economics, and UVic’s Faculty of Social Science for financial support.

# Map

Harbour Ferry Route (approx. 10min)



## List of Registered Attendees

Umer Asif	Birmingham City University
Forood Azargoshasbi	University of Victoria
Deven Azevedo	University of Victoria
Luca Benati	University of Bern
Erick Díaz Cadena	University of Victoria
Ken Caldeira	Stanford / Gates Ventures
Alessandra Canepa	University of Turin
Magdalena Cornejo	Universidad Torcuato Di Tella
Francis Diebold	University of Pennsylvania
Lei Duan	Carnegie Science
Marina Friedrich	VU Amsterdam
Markus Fritsch	University of Passau
Vasco Gabriel	University of Victoria
Lola Gadea	University of Zaragoza
Prashikdivya Gajbhiye	University of Massachusetts Amherst
Mahsa Ghahremai	University of New Brunswick
Marc Gronwald	Xi'an Jiaotong-Liverpool University
Oliver Günther	Gunther Analytics
Paul Haimerl	Aarhus University
Geoffrey Harper	University of Victoria, Simon Fraser University
Jason Hawkins	University of Calgary
Jason Hicks	University of Victoria
Robert Kaufmann	Boston University
Roobina Keshishbanoosy	Environment and Climate Change Canada
Imran Ali Khan	Abdul Wali Khan University Mardan
Jonas, Kurlle	University of Oxford
Olivia Kvist	Aalborg University
Kevin J. Lansing	Federal Reserve Bank of San Francisco
Kathrine By Larsen	Aarhus University
Matthew Lewis	Environment and Climate Change Canada
Parker Little	University of Victoria
Rasmus, Lönn	Erasmus University Rotterdam

Ata Malfuzi	Environment and Climate Change Canada
Matthew, Marcoux	University of Victoria
Fulvia Marotta	De Nederlandsche Bank and University of Oxford
Madeleine McPherson	University of Victoria
Shoukat Mehsud	Birmingham City University, UK
Diego Alejandro Prieto Melo	Energy Innovation Center - BTU Cottbus-Senftenberg
David Mitchell	University of British Columbia
Kate Moran	Ocean Networks Canada & University of Victoria
Claudio Morana	University of Milano-Bicocca
Muhammad Bilal Mustafa	Birmingham City University
Abid Nadeem	Birmingham City University
Thomas Nathaniel	University of Cambridge
Elisabetta Pellini	Bayes Business School, University of London
Felix Pretis	University of Victoria
Jonathan, Proctor	University of British Columbia
Kevin Schneider	European Commission DG Joint Research Centre
Moritz Schwarz	Potsdam Institute of Climate Impact Research
Julie Segal	Environmental Defence
Yin Shi	University of Victoria
Luke Stern	University of Victoria
Yiguo Sun	University of Guelph
Martin Paul Jr, Tabe-Ojong	World Bank
Ameneh Mollasharifi Targhi	University of Victoria
Giovanni Urga	Bayes Business School, University of London
Eduardo Vera-Valdés	Aalborg University
Katherine Wagner	University of British Columbia
Martin Wagner	University of Klagenfurt and Institute for Advanced Studies
Tao Wang	University of Victoria
Andrew Weaver	University of Victoria
Matthias, Wirth	University of Hohenheim
Sara Wray-Enns	University of Victoria
Yilan Xu	University of Illinois at Urbana Champaign