FORECASTING THE FUTURE FOR SUSTAINABLE DEVELOPMENT

JUNE 16

14.30 - 14.45 **Welcome & Introduction**

14.45 - 15.30 **Opening Lecture** - How can forecasting help to shape a sustainable future?

» Keynote: **Andrea Saltelli**, Open Evidence Research, Open University of Catalonia

15.30 - 17.00 **Session I** - Innovation and mathematics for sustainable development goals

» Keynote: **Katyna Argueta**, UNDP
» **Tommaso Ciarli**, UNU–MERIT & University of Sussex
» **Carla Sciarra**, Polytechnic University of Turin & CEST
» **Andy Stirling**, University of Sussex

Chair: **Amirali Emami**, University of Leeds

17.00 - 18.15 **Session II** - The debate around non-standard tools for policy making

» Keynote: **Andreas Pyka**, University of Hohenheim
» **Magda Fontana**, University of Turin
» **Andrea Roventini**, Sant'Anna School of Advanced Studies

Chair: **Davide Luzzati**, Sant'Anna School of Advanced Studies & CEST

18.15 - 19.00 **Lecture** -Foundations of complexity economics

» Keynote: **W. Brian Arthur**, Santa Fe Institute

Discussant: **Davide Luzzati**, Sant'Anna School of Advanced Studies & CEST

JUNE 17

9.00 - 11.00 **Workshop** on Forecasting for policy making by OECD-NAEC, with **Alan Kirman**

11.30 - 12.30 **Session III** - Bibliometric approaches to detect emerging technology

» Keynote: **Scott Cunningham**, University of Strathclyde
» **Zsofia Buttel**, Elsevier
» **Daniele Rotolo**, University of Sussex & Polytechnic University of Bari
» **Yi Zhang**, University of Technology Sydney

Chair: TBD

14.30 - 16.00 **Session IV** - Tracing sustainable trajectories with patent analytics

» Keynote: **Adam Jaffe**, Brandeis University
» **Sarbani Chattopadhyay** & **Carsten Guderian**, LexisNexis IP/PatentSight
» **Kyle Higham**, Hitotsubashi University
» **Daniela Palma**, ENEA

Chair: **Tommaso Portaluri**, CEST, IN Srl & BRIDGES project

16:00 - 17:00 **Lecture** - Stop explaining black box machine learning models for high-stakes decision and use interpretable models instead

» Keynote: **Cynthia Rudin**, Duke University

Discussant: **Pierfrancesco Beneventano**, Princeton University & CEST

17.00 - 19.00 **Workshop** on Explainability of AI by IBM, with **Dennis Wei**

JUNE 18

11.00 - 13.00 **Session V** - Bringing transparency to ESG modelling and investing

» Keynote: **Philipp Kruger**, University of Geneva
» **Claudia A. Bolli**, Swiss Re
» **Carmela Mondino**, Partners Group
» **Carlo Papa**, Enel Foundation
» **Richard Patalano**, OECD

Chair: **Luca Mosetti**, Swiss Re

14.00 - 15.30 **Session VI** - Policy pull or science push? Expert advice to government in the post-normal era

» Keynote: **Joanna Chatway**, University College London
» **Frédérique Bone**, University of Sussex
» **Giorgio Matteucci**, National Research Council of Italy & BRIDGES project
» **Roger Pielke Jr.,** University of Colorado Boulder

Chair: TBD

15.30 - 17.00 **Final Roundtable** - New approaches to forecasting for sustainability

» **Jean-Philippe Bouchaud**, Capital Fund Management
» **Guido Chiarotti**, IN Srl
» **Megan Greene**, Harvard Kennedy School
» **William Hynes**, OECD-NAEC

Chair: **Laura Martinelli**, IN Srl