



Programme Book



IAERE

Italian Association of Environmental
and Resource Economists

Sixth Annual Conference
15th-16th February 2018, Turin

University of Turin, Department of Economics and Statistics "Cognetti de Martiis"



UNIVERSITÀ
DEGLI STUDI
DI TORINO



Dipartimento di
Economia e Statistica
Cognetti de Martiis

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E A E R E

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Make a Donation to IAERE

Please consider making a donation to IAERE.

Your donation will support the Association to further its aims.

Information on how to donate is available at the IAERE website at

www.iaere.org/form_donation.php.

Welcome to IAERE/2018

Dear Participant,

we are glad to welcome you to the Sixth Annual Conference of the Italian Association of Environmental and Resource Economists (IAERE), hosted by Department of Economics and Statistics of the University of Turin at the premises of the *Campus Luigi Einaudi*.

This year's programme, with 13 Parallel Sessions divided into four slots on Thursday and five on Friday, features the presentation of 77 accepted papers (64 in the Parallel Sessions and 13 in the Poster Session) out of the 143 submitted. Space and time constraints have forced us to implement a selection process tighter than expected; the positive side is a very high quality of accepted papers. A Special Parallel Session has been organized in collaboration with the *Italian Association for Agricultural and Applied Economics* (AIEAA), whom we thank for accepting our invitation.

We are very grateful to the two distinguished keynote speakers that will deliver this year's Plenary Lectures: Matti Liski, from the Department of Economics, Aalto University, Finland, and Maja Schlüter, from the Stockholm Resilience Center, Stockholm University, Sweden.

The General Assembly of IAERE Members will take place on the first day, after lunch, in the Aula Magna. All IAERE members are warmly invited to participate, as the General Assembly is the most important opportunity to share opinions among members and contribute to shape the development of our Association.

To complement the Conference scientific programme, we have organized a social programme that we hope will stimulate reciprocal acquaintance and debate in a more informal environment. With the aim to fit in most participants' travel schedule, this year's Social Event - a guided tour of Baroque Turin - will take place on the first day of the conference, before the Social Dinner.

During the Closing Ceremony, the Association will announce this year's Awards: the IAERE 2018 Young Environmental Economist Award, a recognition given to the best paper presented by a young economist at the IAERE Annual Conference; and the Best Poster Award, which will be granted to the best poster presented, according to criteria of research quality and originality.

This Conference has been made possible by the substantial support of the Department of Economics and Statistics of the University of Turin, with generous contributions by the Italian Ministry of Environment, Land and Sea, the Center for Studies on Federalism and the Master in Data Science (MADAS) of the Collegio Carlo Alberto. We also thank Springer for sponsoring the Best Poster Award, and Caffarel for offering a very turinese welcome gift. Special thanks are due to all those who have contributed to this event by providing logistic and technical assistance before the event and will do so during the Conference.

We hope you will find the scientific programme stimulating and thought provoking, and that the work of all of us will benefit from the possibility to exchange ideas within the context of the Conference.

Thank you for your participation.

On behalf of the Organizing Committee

Silvana Dalmazzone (chair) and Vito Frontuto (vice-chair)

Committees

ORGANISING COMMITTEE

Silvana Dalmazzone (chair, University of Torino)
Vito Frontuto (vice-chair, University of Turin)
Marco Bagliani (University of Turin)
Simone Borghesi (University of Siena)
Alessandro Corsi (University of Turin)
Magda Fontana (University of Turin)
Massimiliano Mazzanti (University of Ferrara)
Anna Montini (University of Bologna)

PROGRAMME COMMITTEE

Silvana Dalmazzone (chair, University of Turin)
Vito Frontuto (vice-chair, University of Turin)
Marco Bagliani (University of Turin)
Andrea Bigano (Fondazione Euro-Mediterranean Centre on Climate Change, Ca' Foscari University of Venice and Far East Federal University Vladivostok)
Alessandro Corsi (University of Turin)
Simone Borghesi (University of Siena)
Valentina Bosetti (Ettore Bocconi Department of Economics)
Giangiaco Bravo (Linnaeus University)
Alessio D'Amato (University of Rome Tor Vergata)
Sergio Giaccaria (Joint Research Center, European Commission, Petten)
Rosalba Ignaccolo (University of Turin)
Alessandra La Notte (Joint Research Center, European Commission, Ispra)
Giovanni Marin (University of Urbino Carlo Bo)
Alberto Majocchi (University of Pavia and Centre for Studies on Federalism)
Massimiliano Mazzanti (University of Ferrara and SEEDS)
Carlos Dionisio Pérez-Blanco (Fondazione Euro-Mediterranean Centre on Climate Change and Ca' Foscari University of Venice)
Francesco Quatraro (University of Turin)
Aldo Ravazzi Douvan (Italian Ministry of Environment, Land and Sea – DG Sustainable Development & International Affairs – TA Sogesid – Luiss, Rome)
Sergio Vergalli (University of Brescia)
Maria Franco Villoria (University of Turin)
Mariangela Zoli (University of Rome Tor Vergata)

About IAERE

The Italian Association of Environmental and Resource Economists (IAERE) is a national scientific association which aims:

- to contribute to the development and application of environmental and resource economics as a science in Italy;
- to encourage and improve communication between teachers, researchers and students in environmental and resource economics;
- to develop and encourage the cooperation between university level teaching institutions and research institutions in Italy;
- to make available to institutions research results and encourage their application;
- to develop and encourage cooperation among companies, trade unions and environmental NGOs.

The Association accomplishes its aims mainly by organizing conferences, meetings, panels. The main Association's activities are its Annual Conference series, inaugurated in 2013, and its School series, inaugurated in 2016.

IAERE's website serves as platform for exchange regarding events, open positions and other useful information in the field of Environmental and Resource Economics in Italy and beyond.

IAERE was founded in 2012, and is based in Venice. Its members are based Italy and abroad, from academic institutions, the public sector, and the private industry.

Membership is open to individuals who by their profession, training and/or function are involved in environmental and resource economics as a science, and to institutions which operate in fields connected with the aims of the Association.

IAERE website: www.iaere.org

IAERE COUNCIL

Simone Borghesi – President

Massimiliano Mazzanti – Past President

Sergio Vergalli – President Elect

Silvana Dalmazzone – Ordinary Member

Fabio Eboli – Ordinary Member

Giovanni Marin – Ordinary Member

Mariangela Zoli – Ordinary Member

Monica Eberle – Secretary General

IAERE Institutional members

Standard Institutional Members

- Fondazione Eni Enrico Mattei (FEEM)

University Institutional Members

- "Alma Mater Studiorum" University of Bologna, Department of Economics
- Bocconi University, Centre for Research on Energy and Environmental Economics and Policy (IEFE)
- European University Institute
- University of Brescia, Department of Economics and Management
- University of Ferrara, Department of Economics and Management
- University of Rome Tor Vergata, Department of Economics and Finance
- University of Siena, Department of Political and international sciences
- Venice International University (VIU)

IAERE is most grateful to Institutional Members for their support.

IAERE General Assembly of Members

IAERE members are invited to participate in the General Assembly of Members taking place on February 15th, 2018, from 14.30 to 15.30 in Room Aula Magna.

Proposed agenda

- | | |
|-------------|--|
| 14.30-14.35 | Presentation of the Council 2018-2019 |
| 14.35-14.40 | Elections 2019: Nominating Committee |
| 14.40-14.45 | Individual and institutional membership profiles 2017 and 2018, Ratification of members' lists, Resolution on the loss of the status of member |
| 14.45-14.50 | Approval of the minutes of the General Assembly of Members held on February 16th, 2017 |
| 14.50-15.05 | Management of the Association's Secretariat in 2018-2020 |
| 15.05-15.15 | Accounts: final accounts 2017 and preliminary budget 2018 and 2019 |
| 15.15-15.25 | Calendar of future IAERE events |
| 15.25-15.30 | Any other business |

IAERE Young Environmental Economist Award

This year the Association is announcing the third edition of the *IAERE Young Environmental Economist Award*, a recognition given to the best paper presented by a young economist at the Annual Conference.

With this Award the Association aims to reward new ideas addressing key environmental and resource economic issues at the national, European and global scale. Both theoretical and empirical papers will be considered without any restriction of topics.

Eligible candidates are less than 33 years of age and no more than five years past a PhD defence, should they have a PhD. There is a monetary reward of €1,000 for the presenter of the winning paper.

The Selection Committee comprises the Conference Programme Committee and the IAERE Council, and is co-chaired by the IAERE President and the chair of the Conference Programme Committee.

The Award winner will be announced at the Award and Closing Ceremony, to be held on Friday, February 16th at 15.00, in Room Aula Magna.

Best Poster Award

The best poster presented at the Conference will be recognized with the Best Poster Award. It will be granted to the best poster presented, according to the following criteria: quality of the research in terms of theoretical and methodological aspects; originality of the work presented; added value of the research in terms of “closing a gap” in knowledge; adequateness and originality of poster layout in relation to its content.

The Award winner will be announced at the Award the Award and Closing Ceremony, to be held on Friday, February 16th at 15.00, in Room Aula Magna.

Best Poster Award Committee

Marco Bagliani (University of Turin)

Andrea Bigano (Fondazione Euro-Mediterranean Centre on Climate Change, Ca' Foscari University of Venice and Far East Federal University Vladivostok)

Simone Borghesi (University of Siena)

Alessandro Corsi (University of Turin)

Silvana Dalmazzone (University of Turin)

Alessio D'Amato (University of Rome Tor Vergata)

Fabio Eboli (Italian Ministry of Environment, Land and Sea - TA Sogesid)

Maria Franco-Villoria (University of Turin)

Vito Frontuto (University of Turin)

Alberto Majocchi (University of Pavia and Centre for Studies on Federalism, Torino)

Giovanni Marin (University of Urbino Carlo Bo)

Massimiliano Mazzanti (University of Ferrara)

Carlos Dionisio Pérez-Blanco (Fondazione Euro-Mediterranean Centre on Climate Change and Ca' Foscari University of Venice)

Aldo Ravazzi Douvan (Italian Ministry of Environment, Land and Sea –TA Sogesid – Luiss, Rome)

Sergio Vergalli (University of Brescia)

Mariangela Zoli (University of Rome Tor Vergata)

IAERE/2018 General Information

Registration and information desk

The registration and information desk is open throughout the entire Conference.

Badges

The name badge given to you when you register ensures your admission to the Conference. Please make sure you wear it all times. It is important to wear your name badge also at the social events you are registered to.

Wi-Fi connection

Wi-Fi connection is available to Conference participants through the 'unito-guest' network. Your personal username and password are available at the registrations' desk.

Last minute changes

General announcements, changes and updates to the programme will be displayed at the registration desk.

Useful Contacts

IAERE Secretariat: iaere@iaere.org

Conference Venue

The Conference will be held in the Campus Luigi Einaudi (CLE) of the University of Turin, Lungo Dora Siena 100, 10153 Torino and is hosted by the Department of Economics and Statistics 'Cognetti de Martiis' (EST).

How to reach the Conference Venue from the City Center

By bus:

From Porta Susa Station the departure address is Piazza XVIII Dicembre

From Porta Nuova Station the departure address is Piazza Carlo Felice

Further information is available at following site:

<http://gttweb.5t.torino.it/gtt/en/percorsi/percorsi-ricerca.jsp>

(enter 'Stazione di Porta Susa', or Stazione di Porta Nuova')

Taxis: 011 5730. A Taxi-sharing message board will be available in the Main Hall, to facilitate car sharing.

How to reach the Conference Venue from the Airport

Public transport is available, with different bus/train+bus options, from Caselle Airport to CLE. Choose your itinerary with the 'Muoversi a Torino' service:

<https://www.muoversiatorino.it>

Taxis: 011 5730 (allow about 30-40 minutes, depending on traffic).

A Taxi-sharing message board will be available in the Main Hall, to facilitate car sharing.

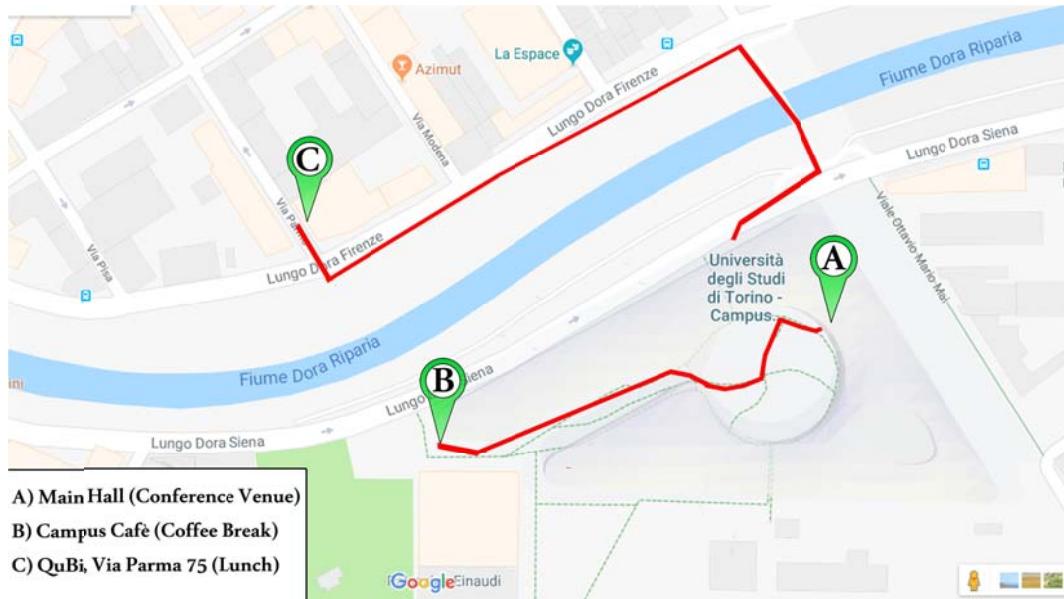
Rooms

Parallel sessions: Room A1, A2, B1, B2 (ground floor), E5 (first floor), around the Main Hall.
Plenary Sessions: Aula Magna, ground floor, behind the Main Hall reception.

Coffee breaks will be served at the Campus Cafè, within the CLE.

Lunches will be served at *QuBi*, Via Parma 75 (a 5-minute walk from the conference venue).

A map with itineraries is available below.



Social Event – Friday, Thursday 15th

Baroque Turin Guided tour

February 15th, 18:00 - 20.15

Meeting point: 18:00 Piazza Castello/corner with Via Garibaldi.

The tour is reserved for participants who registered in advance.

Turin is considered the capital of Baroque art. It was designed by the architects of the court and rebuilt between 1600 and 1700 to be a symbol of the greatness of the House of Savoy. On Thursday at 17:30, at the end of the conference programme, a 15-minute walk (see map below) will take us from the Campus to the city centre, where a guided tour will introduce us to the architecture of Filippo Juvarra (Palazzo Madama, Church of St. Filippo Neri) and Guarino Guarini (Church of San Lorenzo, Chapel of the Holy Shroud, Palazzo Carignano), and then the Royal palace, the Cathedral, as well as squares, arcades, fine cafes and courtyards of Baroque Turin. The tour will be available in English and Italian with individual

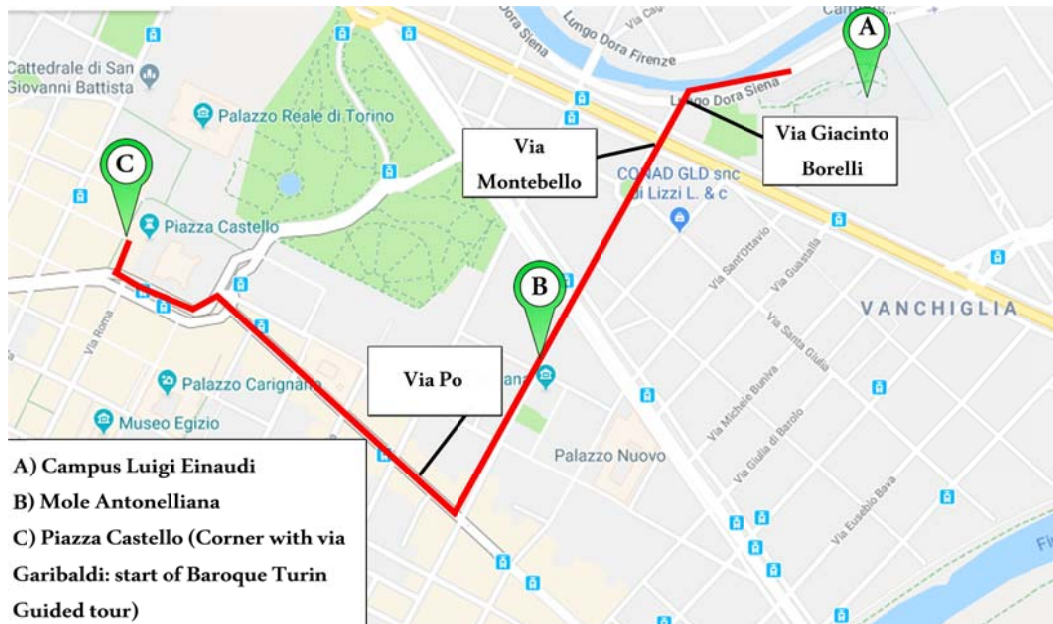
headphones and guided by an art historian.

The tour will end in front of the venue of the Conference Dinner, to conclude a long day with a taste of Piedmontese cuisine.

Operated by



Itinerary from the Conference venue to the Social Event's meeting point



Conference Dinner – Thursday, February 15th

The Conference Dinner will take place on Thursday evening, at 20:30, at the Ristorante Carlina, located in a XVII century building at the earth of the city centre.

The conference dinner is reserved for participants who registered in advance.



Ristorante Carlina

Piazza Carlo Emanuele II (Carlina), 15 - 10123 Torino

Tel.: +(39)0118601607. <http://ristorantecarlina.it/site/contatti/>



Keynote Lectures



Carbon leakage: a mechanism design approach

Matti Liski

Department of Economics, Aalto University, Finland

It is tricky to design local regulations on global externalities. Firms may relocate and merely shift the externality-causing activities to another location if the regulation is too costly and inadequately compensated. Yet, the true ease of moving is only known by the firm, and any compensation scheme comes at a risk of paying unnecessarily high transfers to some of the firms. Regulated industries fiercely lobby for compensations, emphasizing the cost of regulation and easiness to relocate production to other countries. If the aim is to keep all the firms, these claims need to be respected although they are difficult to verify. But doing so will create potentially large private rents to the industries. The issue has become topical in the EU Emission Trading Scheme (ETS), where industrial emitters considered to be susceptible to “carbon leakage” have received both generous allocations of free emission allowances and direct monetary compensations. This set-up raises an important question for the policy design that we address in this research. How should such local regulations on a global problem be designed to reach environmental targets and to limit “leakage” without creating excessive private rents? In particular, how much industries under leakage risk should be compensated, and how they should be compensated — with lump-sum transfers or by compromising on the level of regulation? The main challenge, that seems unavoidable, is that only firms know, firstly, the true costs of moving to another location and, secondly, the cost of compliance if staying in the regime. Taking a mechanism design approach, we study the optimal design of environmental policies when firms have such two-dimensional private information. We also provide an illustrative quantification of the optimal carbon leakage policy for key sectors in the EU emissions trading program.

Matti Liski is a Professor at the Department of Economics at Aalto University. He has been a visiting scholar or associate at the Toulouse School of Economics, the MIT Center for Energy and Environmental Policy Research, the Energy Policy Research Group (EPRG) of the University of Cambridge, and CESifo-Munich. His fields of interests are energy and environmental markets, natural resources, microeconomic theory, public economics, growth and industrial organization. His most recent contributions to environmental and resource economics relate to climate policies and carbon pricing. His past and current professional duties include: editor of the Scandinavian Journal of Economics, and associate editor or member of board of Environmental and Resource Economics and Environment and Development Economics.



Understanding and managing change in a complex and interdependent world: A modelling approach

Maja Schlüter

Stockholm Resilience Center, Stockholm University, Sweden

Many of the environmental problems we are facing today are the result of complex interactions between humans and ecosystems across multiple scales. They can cause sudden resource collapses, such as the collapse of the Baltic cod fishery, but can also render an unsustainable situation very persistent, such as in poverty traps. While human action drives ecological change it is often the type and time scale of human responses to ecological change that triggers or prevents a regime shift or creates a very persistent state. Understanding the social-ecological mechanisms that prevent undesirable change or enable desired change will help identify entry points for improving governance and enabling sustainability transformations. In this talk I will present work that combines in-depth field research with mathematical and computational modelling to identify mechanisms of change in natural resource use systems, particularly fisheries and agriculture. I will focus on the importance of social-ecological feedbacks and discuss the use of multi-methods approaches to facilitate an integrative analysis that builds on knowledge about human behaviour, societal and ecological processes from various disciplines.

Maja Schlüter is Associate professor at the Stockholm Resilience Centre, Stockholm University. Maja's research focuses on social-ecological interactions and mechanisms underlying social-ecological systems phenomena, such as the collapse of the Baltic Sea cod, poverty traps, the diversity of self-governance forms in Mexican small-scale fisheries, or cooperation in common pool resource management. Her work uses mathematical and agent-based modeling to test hypotheses about multi-level causes of observed phenomena and to explore consequences of selected human-nature interactions. She is head of the ERC funded research group SES-LINK, member of the editorial board of Ecology and Society and co-leads the complex adaptive systems and resilience thinking stream at the Stockholm Resilience Center.

Programme

FEBRUARY 15th 2018 – THURSDAY

8:30 - 9:00 **REGISTRATIONS**

9:00 - 9:30 **OPENING CEREMONY** Room Aula Magna
 Chair: Silvana DALMAZZONE (University of Turin)
 Egidio DANSERO (Rector's Delegate, University of Turin)
 Federico REVELLI (Head - Department of Economics and Statistics, University of Turin)
 Roberto PALEA (Board member - Centre for Studies on Federalism)
 Roberto RONCO (Director - DG Environment and Land Governance and Protection,
 Piedmont Region)
 Simone BORGHESI (IAERE President, University of Siena)

9:30 - 10:30 **KEYNOTE LECTURE** Room Aula Magna
 Maja SCHLÜTER, Stockholm Resilience Center, Stockholm University,
 Sweden
**Understanding and Managing Change in a Complex and
 Interdependent World: A Modelling Approach**
 Chair: Giangiacomo BRAVO (Linnaeus University)

10:30 - 11:00 **COFFEE BREAK** (Campus Cafè)

11:00 - 13:00 **PARALLEL SESSIONS 1**

11:00 - 13:00 **WATER USES AND POLICIES** Room A1
 Chair: Carlos Dionisio PEREZ-BLANCO (Fondazione Euro-Mediterranean
 Centre on Climate Change and Ca' Foscari University of Venice)

A Coupled Positive Multi-Attribute Utility Programming and Computable General Equilibrium Model to Assess the Micro-macro Feedback Links of Agricultural Water Management

Gabriele STANDARDI (Fondazione Euro-Mediterranean Centre on Climate Change and Ca' Foscari University of Venice)

Co-author(s): Carlos Dionisio Perez-Blanco, Ramiro Parrado and Carlos Gutierrez-Martin

Global Economic and Food Security Impacts of Demand-driven Water Scarcity

Victor NECHIFOR (UCL Institute for Sustainable Resources)

Drought and Extreme Heat Effects on Wheat Yields: Statistical Crop Modelling at the Farm Scale in Puglia and the Po River Basin

David GARCÍA-LEÓN (Fondazione Eni Enrico Mattei)
Co-author(s): Raúl López, Andrea Toretì and Matteo Zampieri

Evaluating Impacts of Alternative Adaptation Strategies on the Dynamics of Human-Water Systems: A Methodological Framework for an Integrated-Modular Eco-Hydrologic and Multi-Attribute Revealed Preference Model

Arthur HRAST ESSENFELDER (Fondazione Euro-Mediterranean Centre on Climate Change and Ca' Foscari University of Venice)
Co-author(s): Carlos Dionisio Perez-Blanco

Necessity is the Mother of Invention: Climatic shocks and the Emergence of the Reluctant Entrepreneur

Salvatore DI FALCO (University of Geneva)
Co-author(s): Giacomo De Giorgi and Tesfamichael Worsen

11:00 - 13:00 **CLIMATE CHANGE: SOCIO-ECONOMIC IMPACTS**
Chair: Silvana DALMAZZONE (University of Turin)

Room A2
Thu. 15 Feb 2018

Adaptation to Negative Rainfall Shocks: Evidence from Ethiopia

Avichal MAHAJAN (Institute of Economics and Econometrics, University of Geneva)
Co-author(s): Salvatore Di Falco

Distribution of Global Temperature Effects on Downscaled Economic Activity

Shouro DASGUPTA (Fondazione Euro-Mediterranean Center on Climate Change and University Ca' Foscari of Venice)
Co-author(s): Francesco Bosello, Enrica De Cian and Malcolm Mistry

Crop Diversity as a Strategy for Adaptation to Climate Change: Insights from Uganda Panel Data

Chiara ANTONELLI (University of Rome Tor Vergata)
Co-author(s): Manuela Coromaldi and Giacomo Pallante

Climate Change, Armed Conflicts and Socio-Economic Conditions: A Georeferenced Map of Africa

Federica CAPPELLI (Roma Tre University)
Co-author(s): Valeria Costantini, Keti Lelo, Elena Paglialonga and Giorgia Sforza

11:00 - 13:00 **ENERGY POLICIES I**
Chair: Ivan FAIELLA (Bank of Italy)

Room B1
Thu. 15 Feb 2018

Energy Abundance, Trade and the Geographical Distribution of the Manufacturing Sector in China

Tong ZHU (European University Institute)

Co-author(s): Robert Elliott and Puyang Sun

Why is it so Hard to Stop Using Oil? Fossil Fuel Discoveries and International Trade

Chiara RAVETTI (University of Oxford)

Finding Itself in the Post-Paris World: Russia in the New Global Energy Landscape

Igor MAKAROV (National Research University - Higher School of Economics)

Co-author(s): Sergey Paltsev and Y.-H. Henry Chen

Polluter Pays Principle implementation in the Italian electricity sector. A comparison of environmental taxes with the air emissions external costs of thermal power plants

Andrea MOLOCCHI (Italian Ministry of Environment, Land and Sea - TA Sogesid)

Co-author(s): Emanuela Recchini and Angelica Tudini

Energy Costs and Competitiveness in Europe

Ivan FAIELLA (Bank of Italy)

Co-author(s): Alessandro Mistretta

11:00 - 13:00 **R&D and TECHNOLOGICAL CHANGE**
Chair: Massimiliano MAZZANTI (University of Ferrara and SEEDS)

Room B2
Thu. 15 Feb 2018

The Consequences of Income Diversification on Natural Resources in a Dynamic Two-sector Small Economy

Gala SIPOS (University of Bern)

Going Green: Environmental Regulation and Collaboration Networks

Fabrizio FUSILLO (University of Turin)

Co-author(s): Francesco Quatraro and Stefano Usai

Should Environmental R&D be Supported More Than Other R&D Projects?

Rolf GOLOMBEK (Frisch Centre)

Co-author(s): Mads Greker and Michael Hoel

A DDF Bootstrapped Framework for Estimating Eco-efficiency: The Influence of the Financial Structure in the Italian Polluting Industries

Alessandro MANELLO (IRCrES-CNR)

Co-author(s): Greta Falavigna

The generation of knowledge and its impact on following inventions: Do green technologies differ from non-green ones?

Nicolò BARBIERI (University of Ferrara)

Co-author(s): Alberto Marzucchi and Ugo Rizzo

13:00 - 14:30 **LUNCH** (Qubi, Via Parma 75)

14:30 - 15:30 **IAERE General Assembly of Members** Room Aula Magna
Thu. 15 Feb 2018

15:30 - 17:30 **PARALLEL SESSIONS 2** Thu. 15 Feb 2018

15:30 - 17:30 **BEHAVIOUR AND PREFERENCES TOWARDS THE ENVIRONMENT** Room A1
Chair: Mariangela ZOLI (University of Rome Tor Vergata) Thu. 15 Feb 2018

Environmental Concerns and Household Waste Recycling

Maria Carmela APRILE (Parthenope University)

Co-author(s): Damiano Fiorillo

The Energy Trap

Alessandro SPIGANTI (University of Edinburgh)

Co-author(s): David Comerford

Policy Awareness and the Impact of Fiscal Policies: Evidence from Vehicle Registration Taxes in Switzerland

Davide CERRUTI (ETH Zürich)

Co-author(s): Claudio Daminato and Massimo Filippini

Farm Size and Farmers' Environmental-friendly Practices

Alessandro CORSI (University of Turin)

Co-author(s): Silvia Novelli

Dietary Changes for a Better Environment? A Quali-quantitative Policy Assessment

Andrea BIGANO (Fondazione Euro-Mediterranean Centre on Climate Change, Ca' Foscari University of Venice and Far East Federal University Vladivostok)

Co-author(s): Francesco Bosello and Jacopo Zotti

15:30 - 17:30 **LAND USE AND ENVIRONMENTAL DEGRADATION** Room A2
Chair: Roberto RONCO (DG Environment and Land Governance and
Protection, Piedmont Region) Thu. 15 Feb 2018

Urban Morphology and PM10 Concentration in European Cities: An Empirical Assessment

Stefano PAREGLIO (Fondazione Eni Enrico Mattei)

Co-author(s): Gianni Guastella and Federica Cappelli

Land Fragmentation, land Consolidation and Agricultural Productivity: Evidence from France

Jacint ENRICH MOYA (Toulouse School of Economics)

Co-author(s): Sylvain Chabé-Ferret

Statistiche ufficiali sui prelievi di risorse minerali. Lo sviluppo di analisi territoriali e indicatori di pressione ambientale per l'Italia

Donatella VIGNANI (ISTAT, Italian National Institute of Statistics)

Land Use and Pollution in a Two-sector Evolutionary Model

Gianluca IANNUCCI (University of Florence)

Co-author(s): Angelo Antoci and Simone Borghesi

Stolen Land! Assessing the Impact of Soil Loss in Malawi

Giacomo PALLANTE (Ministry of Environment, Land and Sea, TA Sogesid)

Co-author(s): Solomon Asfaw, Carlo Orecchia, Alessandro Palma

15:30 - 17:30 **EXPERIMENTAL ECONOMICS AND ENVIRONMENTAL VALUATION**

Chair: Elisabetta STRAZZERA (University of Cagliari)

Room B1
Thu. 15 Feb 2018

Social Structure and Social Preferences in a Lab-in-the-Field Common Pool Resource Experiment

Filippo Maria D'ARCANGELO (Toulouse School of Economics)

Co-author(s): George Joseph, Gautam Gupta, Barry Sopher and Quentin Wodon

Does Risk Communication Really Decrease Cooperation in Climate Change Mitigation?

Mike FARJAM (Linnaeus University)

Co-author(s): Olexandr Nikolaychuk and Giangiacomo Bravo

If Future Generations Had a Say: Experimental Evidence on Resource Sharing with Veto Power of a Future Generation

Stephan WOLF (University of Freiburg)

Co-author(s): Katharina Wagner

Nudging and Environmental Corporate Responsibility: A Natural Experiment

Francesco SALUSTRI (University of Rome Tor Vergata)

Co-author(s): Leonardo Becchetti and Pasquale Scaramozzino

Evaluation of Ecosystem Services in Italy: a Choice Experiment study with Posterior Analysis of Conditional Preference Distributions

Elisabetta STRAZZERA (University of Cagliari)

Co-author(s): Vania Statzu and Daniela Meleddu

15:30 - 17:30 **RISK AND EXTREME WEATHER EVENTS**

Chair: Marcella VERONESI (University of Verona)

Room B2
Thu. 15 Feb 2018

Value of Statistical Life connected with seismic risk. Empirical evidence from Italy

Andrea RAMPA (Research Institute on Sustainable Economic Growth - IRCrES-CNR, Milan)

Co-author(s): Nicolò Barbieri, Massimiliano Mazzanti and Anna Montini

Natural Disaster Risk and the Distributional Dynamics of Damages: a Global Analysis

Matteo CORONESE (Scuola Superiore Sant'Anna)

Co-author(s): Francesco Lamperti, Francesca Chiaromonte and Andrea Roventini

Building the 'Disaster Risk Assessment Index'

Marco MODICA (CNR - IRCRES)

Co-author(s): Giovanni Marin, Susanna Paleari, Roberto Zoboli

Urban Sustainability: Investigating the Environmental Impact of Cities Across European Countries

Elisabetta MARZANO and Antonella D'AGOSTINO (University of Naples Parthenope)

Co-author(s): Bruno Chiarini and Andrea Regoli

Extreme Weather Events, Mortality, and Energy Prices: A Natural Experiment from Japan

Marcella VERONESI (University of Verona)

Co-author(s): Shinsuke Uchida

18:00 - 20:15 **SOCIAL EVENT – Baroque Turin Guided Tour**
Meeting point: h 18:00 Piazza Castello/corner with via Garibaldi

20:30 **SOCIAL DINNER – Ristorante Carlina**
Piazza Carlo Emanuele II (Carlina) 15, 10123 Torino

FEBRUARY 16th 2017 – FRIDAY

8:30 - 9:00 **REGISTRATIONS**

9:00 - 11:00 **PARALLEL SESSIONS 3**

9:00 - 11:00 **SPECIAL SESSION AIEAA** Room A1
Sustainable Land Management: Between Production and Conservation
Chair: Mara THIENE (University of Padova)

Assessing Common Agricultural Policy Impacts on High Nature Value Farming System

Fabio BARTOLINI (University of Pisa)

Co-author(s): Davide Longhitano, Andrea Povellato.

How Much the Citizens of Milan Value the Ecological Benefits Provided by the Periurban Agriculture?

Paolo SCKOKAI (Catholic University, Milan)

Co-author(s): Linda Arata, Gianni Guastella, Stefano Pareglio, Riccardo Scarpa

Measuring Impacts and Adaptations to Climate Change: A Structural Ricardian Analysis of Irrigation Decisions in Italy

Martina BOZZOLA (ETH Zurich and Queen's University Belfast)

Co-author(s): Emanuele Massetti and Robert Mendelsohn

Agri-environmental Policies and the Formation of Coalitions on Pollination Management

Davide VIAGGI (University of Bologna)

Co-author(s): Matteo Zavalloni and Meri Raggi

Congestion Management in Protected Areas: Accounting for Respondents' Inattention and Preference Heterogeneity in Stated Choice Data

Mara THIENE (University of Padova)

Co-author(s): Cristiano Franceschinis and Riccardo Scarpa

9:00 - 11:00

ENERGY POLICIES II

Chair: Sergio VERGALLI (University of Brescia)

Room A2

Fri. 16 Feb 2018

Playing on Two Markets: Investment Evaluation of a Biogas - Biomethane Power Plant

Marina BERTOLINI (University of Padova)

Exploring Pathways of Solar PV Learning in Integrated Assessment Models

Samuel CARRARA (FEEM and University of California, Berkeley)

Co-author(s): Michela Bevione, Harmen-Sytze de Boer, David Gernaat, Silvana Mima, Robert C. Pietzcker and Massimo Tavoni

The Diesel Fuel Excise Duty Gap as Compared to Gasoline: An Environmental Coherence Assessment through the External Costs Approach

Cecilia CAMPOREALE (Italian Ministry of Environment, Land and Sea - TA Sogesid)

Co-author(s): Luca Grassi and Andrea Molocchi

Energy Intensity, Environmental Policies and Green Patents: Checking Heterogeneous Country Effects in the EU

Saptorshee Kanto CHAKRABORTY (University of Ferrara)

9:00 - 11:00

CLIMATE CHANGE: POLICY INSTRUMENTS

Chair: Alberto MAJOCCHI (University of Pavia and Centre for Studies on Federalism)

Room B1

Fri. 16 Feb 2018

The Effect of Climate Policies on Italian Employment: A Panel VAR Approach

Alessandro GIOVANNELLI (Italian Ministry of Environment, Land and Sea - TA Sogesid)

Co-author(s): Carlo Orecchia and Giacomo Pallante

An Adjustable Carbon Tax on Gasoline

Stefano VERDE (FSR Climate - European University Institute)

Co-author(s): Valeria di Cosmo

The New EU 2030 Climate and Energy Framework: A Detailed Sectoral Analysis of the Consequences of ETS and non-ETS Emissions Market Segmentation

Carlo ORECCHIA (Italian Ministry of Environment, Land and Sea - TA Sogesid)

Co-author(s): Alessandro Giovannelli and Giacomo Pallante

The Effect of Environmental Regulation on Firm Productivity

Giulia PAVAN (TSE)

Co-author(s): Sara Calligaris, Filippo D'Arcangelo

International Transmission of the Business Cycle and Environmental Policy

Francesca DILUISO (Fondazione Eni Enrico Mattei)

Co-author(s): Barbara Annicchiarico

9:00 - 11:00

CIRCULAR ECONOMY AND INNOVATION

Chair: Alessio D'AMATO (University of Rome Tor Vergata)

Room B2

Fri. 16 Feb 2018

Does Host Market Regulation Induce Cross Border Environmental Innovation?

Giovanni MARIN (University of Urbino 'Carlo Bo')

Co-author(s): Antonello Zanfei

Circular Economy as Business Model, Circularity as Environmental Policy Target

Jacopo ZOTTI (University of Trieste)

Co-author(s): Andrea Bigano

On the Adoption of Circular Economy Practices at the Firm Level: Does Their Financing Make a Difference?

Claudia GHISSETTI (Joint Research Centre - EC)

Co-author(s): Sandro Montresor

The New Italian Framework for Circular Economy: Background, Process, Indicators and Measurement Challenges

Fabio EBOLI (Italian Ministry of Environment, Land and Sea - TA Sogesid)

Resource Efficiency, Environmental Policy and Eco-Innovations for a Circular Economy: Evidence from EU Firms

Alessio D'AMATO (University of Rome Tor Vergata)

Co-author(s): Giulio Cainelli and Massimiliano Mazzanti

9:00 - 11:00

NATURAL RESOURCES AND ECOSYSTEM SERVICES

Chair: Aldo RAVAZZI DOUVAN (Italian Ministry of Environment,
Land and Sea – DG Sustainable Development & International
Affairs – TA Sogesid – Luiss, Rome)

Room E5

Fri. 16 Feb 2018

Soil Erosion in the European Union: From Direct Costs to Macro-economic Effects

Francesco BOSELLO (Fondazione Euro-Mediterranean Centre on Climate Change and University of Milan)

Co-author(s): Panagos Panos, Gabriele Standardi, Pasquale Borrelli, Emanuele Lugato and Luca Montanarella

Implementing a System for Ecosystem Services Accounting in EU: The Role of Complementary Supply and Use Tables

Alessandra LA NOTTE (European Commission Joint Research Centre)

Co-author(s): Sara Vallecillo, Alexandra Marques, Joachim Maes

Assessing Governance Strategies for Ecosystem Services: A Case Study of the Trasimeno Lake (Perugia, Umbria, Italy)

Greti LUCARONI (Italian Ministry of Environment, Land and Sea - TA Sogesid)

Integrating Economics and Critical Depensation in the Design of Fisheries' Policies: Defining Harvest Control Rules with Age Structured Bio Economic Model

Renato ROSA (Nova School of Business and Economics, UNL)

Co-author(s): Tiago Costa and Rui Mota

Wildlife Conflicts: Wolves vs. Moose

Anders Odd SKONHOFT (Norwegian University of Science and Technology)

11:00 - 11:30 **COFFEE BREAK** (Campus Cafè)

11:30 - 12:30 **POSTER SESSION**

Agricultural Patents as an Adaptation to Climate Change: A European Analysis of Farmers' Efficiency

Sabrina AUCCI (University of Palermo)

Co-author(s): Manuela Coromaldi, Nicolò Barbieri, Donatella Vignani

An Environmental Kuznets Curve for Water Footprint: Evidence from a Worldwide Panel Dataset

Marco BAGLIANI (University of Turin)

Co-author(s): Benedetta Falsetti, Vito Frontuto, Rosalba Ignaccolo, Francesco Laio and Emanuele Vicendone

Solving Climate Dilemmas is a Trivial Task (on MTurk)

Giangiaco BRAVO (Linnaeus University)

Co-author(s): Mike Farjam, Olexandr Nikolaychuk

Economic Growth and the Forest Development Path: A Re-assessment of the Environmental Kuznets Curve for Deforestation

Nicola CARAVAGGIO (Roma Tre University)

Visual Impact of Agricultural Sheds in Rural Landscape: The Economic Value of Different Mitigation Solutions

Vito FRONTUTO (University of Turin)

Co-author(s): Alessandro Corsi, Paola Gullino, Silvia Novelli and Federica Larcher

Economic Valuation of Ecosystem Services Provided by Green Urban Spaces: A Review and Meta-analysis

Gianni GUASTELLA (Fondazione Eni Enrico Mattei)

Co-author(s): Stefano Pareglio and Riccardo Scarpa

Consumers' Preferences toward Sustainable Clothes: A Survey among Italian Millennials

Francesco MARANGON (University of Udine)

Co-author(s): Stefania Troiano, Federico Nassivera and Matteo Carzedda

Assessing Transition Risk at Microeconomic Level with a Stress Test Methodology

Alessandro RAVINA (Université Paris 1 Panthéon-Sorbonne)

Ready for a Carbon Tax? An Explorative Analysis of University Students' Preferences

Lucia ROTARIS (University of Trieste)

Simulation of Dynamics of Retailers' Freight Provision through an Agent-based Model: The Case of the City of Turin

Elena VALLINO (University of Turin)

Co-author(s): Elena Beretta and Elena Maggi

How inequality and institutional setting impact on eco-innovation?

Emy ZECCA (Sapienza University of Rome)

Co-author(s): Francesco Nicolli

12:30 - 14:00 **LUNCH** (Qubì, via Parma 75)

14:00 - 15:00 **KEYNOTE LECTURE** Room Aula Magna
Matti LISKI, Department of Economics, Aalto University, Finland Fri. 16 Feb 2018
Carbon Leakage: A Mechanism Design Approach
Chair: Simone BORGHESI (IAERE President and University of Siena)

15:00 – 15:30 **AWARD and CLOSING CEREMONY** Room Aula Magna
Fri. 16 Feb 2018
Chair: Simone BORGHESI, IAERE President, University of Siena.
Aldo RAVAZZI DOUVAN (Italian Ministry of Environment, Land and Sea – DG Sustainable Development & International Affairs – TA Sogesid – Luiss, Rome)
Angelo ROBOTTO, Director General - Regional Agency for Environmental Protection, Piedmont;
Paolo MANCIN, DG Environment and Land Governance and Protection, Piedmont Region
Alberto MAJOCCHI, University of Pavia and Vice-President, Centre for Studies on Federalism
Antonio MASSARUTTO, University of Udine, Chair of Organizing Committee for IAERE 2019

Participants' list

The Participants' list is available on the Conference Website.

Presenters' list

Keynote lectures

Matti LISKI, Department of Economics, Aalto University, Finland

Maja SCHLÜTER, Stockholm Resilience Center, Stockholm University, Sweden

Parallel and Poster sessions

Chiara ANTONELLI, Department of Economics and Finance, University of Rome Tor Vergata, Italy

Maria Carmela APRILE, Department of Economic and Legal Studies, Parthenope University, Italy

Sabrina AUCI, Department of European Studies, University of Palermo, Italy

Marco BAGLIANI, Department of Economics and Statistics "Cognetti de Martiis", University of Turin, Italy

Nicolò BARBIERI, Department of Economics and Management, University of Ferrara, Italy

Fabio BARTOLINI, Department of Agriculture, Food and Environment, University of Pisa, Italy

Marina BERTOLINI, Department of Economics and Management, Università di Padova, Italy

Andrea BIGANO, Fondazione Euro-Mediterranean Centre on Climate Change, Ca' Foscari University of Venice, Italy and Far East Federal University Vladivostok, Russia

Francesco BOSELLO, Fondazione Euro-Mediterranean Center on Climate Change and University of Milan, Italy

Martina BOZZOLA, ETH Zurich, Switzerland and Queen's University Belfast, UK

Giangiaco BRAVO, Department of Social Studies, Linnaeus University, Sweden

Cecilia CAMPOREALE, Ministry of Environment, Land and Sea - TA Sogesid, Italy

Federica CAPPELLI, Department of Economics, Roma Tre University, Italy

Nicola CARAVAGGIO, Department of Economics, Roma Tre University, Italy

Samuel CARRARA, FEEM and CMCC, Italy and University of California, Berkeley, USA

Davide CERRUTI, Centre for Energy Policy and Economics, ETH Zürich, Switzerland

Saptorshee Kanto CHAKRABORTY, EMIS, University of Ferrara, Italy

Matteo CORONESE, Department of Economics, Scuola Superiore Sant'Anna, Italy

Alessandro CORSI, Department of Economics and Statistics, University of Turin, Italy

Antonella D'AGOSTINO, Department of Business and Quantitative Studies, University of Naples Parthenope, Italy

Alessio D'AMATO, DEF, University of Rome Tor Vergata, Italy

Filippo Maria D'ARCANGELO, Toulouse School of Economics, France

Shouro DASGUPTA, Fondazione Euro-Mediterranean Center on Climate Change and University Ca' Foscari of Venice, Italy

Salvatore DI FALCO, University of Geneva, Switzerland

Francesca DILUISO, Fondazione Eni Enrico Mattei, Italy

Fabio EBOLI, Ministry of Environment, Land and Sea - TA Sogesid, Italy

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Ivan FAIELLA, Directorate General for Economics, Statistics and Research, Bank of Italy, Italy
Vito FRONTUTO, Department of Economics and Statistics "Cognetti de Martiis", University of Turin, Italy
Mike FARJAM, Linnaeus University, Sweden
Fabrizio FUSILLO, Department of Economics and Statistics Cognetti De Martiis, University of Turin, Italy
David GARCÍA-LEÓN, Fondazione Eni Enrico Mattei, Italy
Claudia GHISETTI, Joint Research Centre - EC, Italy
Alessandro GIOVANNELLI, Ministry of Environment, Land and Sea - TA Sogesid, Italy
Rolf GOLOMBEK, Frisch Centre, Norway
Gianni GUASTELLA, Fondazione Eni Enrico Mattei, Italy
Arthur HRAST ESSENFELDER, Fondazione Euro-Mediterranean Centre on Climate Change and Ca' Foscari University of Venice, Italy
Gianluca IANNUCCI, University of Florence, Italy
Alessandra LA NOTTE, European Commission Joint Research Centre, Italy
Greti LUCARONI, Ministry of Environment, Land and Sea - TA Sogesid, Italy
Avichal MAHAJAN, Institute of Economics and Econometrics, University of Geneva, Switzerland
Igor MAKAROV, Department of World Economy, National Research University - Higher School of Economics
Alessandro MANELLO, IRCrES-CNR, Italy
Francesco MARANGON, Department of Economics and Statistics, University of Udine, Italy
Giovanni MARIN, Dipartimento di Economia, Società e Politica, University of Urbino 'Carlo Bo', Italy
Elisabetta MARZANO, University of Naples Parthenope, Italy
Marco MODICA, CNR - IRCRES, Italy
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Chiara RAVETTI, Department of Economics, University of Oxford, UK
Alessandro RAVINA, Université Paris 1 Panthéon-Sorbonne, France
Renato ROSA, NOVA School of Business and Economics, Portugal
Lucia ROTARIS, DEAMS, University of Trieste, Italy
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Paolo SCKOKAI, Catholic University, Milan, Italy
Gala SIPOS, University of Bern, Switzerland
Anders Odd SKONHOFT, Department of Economics, Norwegian University of Science and Technology, Norway
Alessandro SPIGANTI, University of Edinburgh
Gabriele STANDARDI, Fondazione Euro-Mediterranean Centre on Climate Change and Ca' Foscari University of Venice, Italy
Elisabetta STRAZZERA, Department of Social Sciences and Institutions, University of Cagliari, Italy
Mara THIENE, TESAF, University of Padova, Italy
Elena VALLINO, Department of Economics and Statistics "S. Cognetti de Martiis", University of Turin, Italy
Stefano VERDE, FSR Climate - European University Institute, Italy
Marcella VERONESI, Department of Economics, University of Verona, Italy
Davide VIAGGI, Department of Agricultural and Food Science and Technology, University of Bologna, Italy

Donatella VIGNANI, ISTAT Italian National Institute of Statistics, Italy

Stephan WOLF, Department of Environmental Economics and Resource Management, University of Freiburg, Germany

Emy ZECCA, Department of Social and Economic Sciences, Sapienza University of Rome, Italy

Tong ZHU, Robert Schuman Centre for Advanced Studies, European University Institute, Italy

Jacopo ZOTTI, Department of Political and Social Sciences, University of Trieste, Italy

Instructions for presenters and chairs

Presenters in oral sessions

A computer and a beamer will be available in each room for presentations. We assume that these devices will be used by presenters for their PowerPoint or LaTeX presentation, which can be brought along on a USB memory device. On the other hand, to avoid loss of time, hooking up of personal lap-tops by presenters is discouraged.

Presenters are invited to the room 10 minutes prior to the start of the session, so that presentations can be uploaded onto the computer before the session starts.

Average time available for each presentation, including chairs' and general discussion, is around 20 minutes. The suggested time allocation is 15 minutes for presentation, 5 minutes for discussion.

Presentations will be carried out either in Italian or English, depending on the audience.

Chairs

Chairs are invited to go to the room 10 minutes prior to the start of the session. They introduce the session and the speakers and make sure that the time available is divided equally over the papers to be presented.

Average time available for each presentation, including chairs' and general discussion, is around 20 minutes. The suggested time allocation is 15 minutes for presentation, 5 minutes for discussion. Chairs are invited to use any residual time for allowing further discussion from the floor.

Presentations will be carried out either in Italian or English, depending on the audience.

Moreover, chairs are kindly invited to briefly introduce and guide the discussion with the floor following each presentation and at the end of the session.

Presenters in Poster Session

For the preparation of your poster, please kindly use 2 sheets in the A1 Poster size (Super A1) (91x61cm) in landscape orientation; or, in alternative, 1 sheet in the A0 (91x122cm) format in portrait orientation.

Horizontal size must not exceed 100cm. Please bring your poster with you at the Registration Desk on the first day of the Conference.

Notes

Programme Overview

15th February THURSDAY	16th February FRIDAY
8:30-9:00 Registrations	8.30-9:00 Registrations
9:00-9:30 Opening Ceremony Aula Magna	9:00-11:00 Parallel sessions 3
9:30-10:30 Keynote Lecture - Aula Magna Maja Schlüter	
10:30-11:00 Coffee break	
11:00-13:00 Parallel Session 1	11:00-11:30 Coffee break
	11:30-12:30 Poster Session Main Hall
	12:30-14:00 Lunch
13:00-14:30 Lunch	14:00-15:00 Keynote Lecture - Aula Magna Matti Liski
14:30-15:30 IAERE General Assembly of Members Aula Magna	15:00-15:30 Award and Closing Ceremony Aula Magna
15:30-17:30 Parallel Session 2	
18:00-20:00 Social Events	
20:00-22:30 Social Dinner	