

Wednesday 7 September

15.00-16.30

A	<b>Dialogue session: Transforming innovation from below? Grassroots action for sustainable developments</b> Organiser: Adrian Smith Chair: Adrian Smith Panellists: Judith Sutz, Amber Meikle, Dinesh Abrol, Mariano Fressoli
B	<b>Dialogue session: STI in the United Nations: historical reflections and lessons for the Sustainable Development Goals</b> Organiser: Adrian Ely Chair: Adrian Ely Panelists: Geoff Oldham, Dong Wu, Elenita 'Neth' Daño, Joanna Chataway
C	<b>Dialogue session: 50 years of SPRU research into nuclear power: reflections on the history and prospects of atomic energy</b> Organiser: Phil Johnstone Panelists: Gordon MacKerron, William Walker, Steve Thomas, Bill Nuttall, Malcom Grimston
D	<b>Dialogue session: Policy mixes for innovation: Progress and challenges ahead</b> Organiser: Karoline Rogge, Florian Kern Chair: Florian Kern Panelists: Claire Nauwelaers, Rainer Quitzow, Karoline Rogge, Elvira Uyarra, Dominique Guellec
E	<b>Dialogue session: Rethinking pharmaceutical innovation: New models for more efficient R&amp;D and improved patient access</b> Organisers: Mariana Mazzucato, Michael Hopkins Panelists: Jake Scannell, Richard Torrbett, Virginia Acha, Els Torreele
F	<b>Dialogue session: Governing national and international science, technology and innovation efforts for the grand challenges</b> Organiser and chair: Andreas Stamm Panelists: Keith Smith, Wolfgang Polt, Aurelia Figueroa
G	<b>Dialogue session: The Impact of Innovation on Society: Reflections on the clash between Intellectual Property Rights and Human Rights' protection</b> Organiser: Elisa Guilliani Panelists: Valeria Arza, Anabel Marin
H	<b>Dialogue session: Entrepreneurship, Policy and Industrial Dynamics</b> Organiser: Paul Nightingale Panelists: Alex Coad, Marc Cowling, David Storey
I	<b>Dialogue session: Challenges of Research Impact Assessment for addressing Societal Challenges</b> Organiser: Pierre-Benoit Joly Panelists: François Houllier, Jordi Molas-Gallart, Frank Rijsberman

**Thursday 8 September, Session 1. 09.00-10.30**

A	<p><b>Dialogue session: Open science and the development of policy options for innovation</b> Organiser: Dr Molly Morgan Jones Chair: Professor Joanna Chataway Panelists: Molly Morgan Jones, Elta Smith, Kei Ito</p>
B	<p><b>Dialogue session: Transforming evaluation: How can research assessment help address global challenges and societal transformations?</b> Organiser: Ismael Rafols, Michael Hopkins Panelists: Jonathan Adams, Valeria Arza, Gavin Reddick, Judith Sutz, Jane Tinket, Paul Wouters</p>
C	<p><b>Research session: Innovation, sectoral systems and catch-up cycles</b> Organiser: Franco Malerba Discussant: Ariel Wirkierman</p> <p>Toward a theory of catch-up cycles and changes in industrial leadership: windows of opportunity and responses by firms and countries in the evolution of sectoral systems Keun Lee, <a href="#">Franco Malerba</a></p> <p>Catch-up cycles and changes in industrial leadership in steel and other industries <a href="#">Keun Lee</a>, Jeehoon Ki, Franco Malerba, Martin Bell</p> <p>A history-friendly model of the successive changes in industrial leadership and the catch-up by latecomers <a href="#">Fabio Landini</a>, Keun Lee, Franco Malerba</p>
D	<p><b>Research session: Sustainable and inclusive urban infrastructure: a need for a sea change? (1)</b> <i>Part 1: Sustainable and inclusive urban infrastructure: urban systems</i> Organiser: Ralitsa Hiteva, Kat Lovell and Tim Foxon</p> <p>Towards a New Approach for Infrastructural Innovation: Overcoming Assumptions of Governability for Inclusive and Resilient Urban Systems Mendel Giezen, Eric Chu, Luca Bertolini</p> <p>Transition to sustainable urban waste management <a href="#">Antje Klitkou</a>, Markus M. Bugge, Arne Fevolden</p> <p>Can cities be important actors in realising the public interest benefits of smart meter data? <a href="#">Jess Britton</a></p>
E	<p><b>Research Session: Is Market Selection a Useful Metaphor to Understand Innovation and Economic Dynamics?</b> Organiser: Uwe Cantner, Simone Vannuccini Chair: Simone Vannuccini Discussant: Andrè Lorentz</p> <p>The footprint of evolutionary processes of learning and selection upon the statistical properties of industrial dynamics <a href="#">Giovanni Dosi</a>, Marcelo C. Pereira, Maria Enrica Virgillito</p> <p>Weak selection dynamics and evolutionary competition <a href="#">Werner Hözl</a></p> <p>Schumpeterian interaction: Extending the Replicator Dynamics <a href="#">Uwe Cantner</a>, Simone Vannuccini</p>
F	<p><b>Innovation indicators and performance</b> Innovation in Africa: Measurement, Policy and Global Issues Fred Gault, <a href="#">Luke Mumba</a></p> <p>On the origins of patents as an invention indicator: The legacy of early steam navigation entrepreneurship and historiography <a href="#">Sandro Mendonça</a></p>

	<p>Low-quality patents in the eye of the beholder: Evidence from multiple examiners  <a href="#">Gaétan de Rassenfosse</a>, Elizabeth Webster, Adam Jaffe</p>
G	<p><b>Governance of Innovation 1</b>  Directing innovation with regulation: history, the status quo and proposals for change  <a href="#">Erik Millstone</a></p> <p>Beyond experiments: shaping a joint research agenda for climate governance innovation  <a href="#">Bruno Turnheim</a>, Paula Kivimaa and Frans Berkhout</p> <p>The ‘Asbestos Index’ for disapproved innovations: variation across countries  <a href="#">Alex Coad</a></p>
H	<p><b>Transitions</b>  A Grand Societal Experiment  <a href="#">Arie Rip</a></p> <p>How to study transition problems: a systematic review and methodological critique  <a href="#">Mohammadreza Zolfagharian</a></p> <p>Alternative transition pathways: Challenges for the niche bias of the multi-level perspective  <a href="#">Jochen Markard</a></p>
I	<p><b>Innovation Horizons</b>  The Ecosystem Implications of Commercialization Objectives in Mission-Oriented Public Agencies: Space in the US and the EU  <a href="#">Mariana Mazzucato</a>, Douglas K. R. Robinson</p> <p>Biotechnology as a new techno-economic paradigm which will help power the next long upturn  <a href="#">Andrew Tylecote</a></p> <p>Innovation’s Future: A Counter-Cyclical Strategy To Defeat Austerity  <a href="#">Henry Etzkowitz</a>, Alex Etzkowitz and Alice Zhou</p>
J	<p><b>Science, technology and development</b>  The technology dimension of industrial policy in developing economies: the connection between policy content and the institutional basis of policy-making  <a href="#">Martin Bell</a></p> <p>Benefits and obstacles of openness in science: evidence from four case-studies in Argentina  <a href="#">Valeria Arza</a>, Mariano Fressoli</p> <p>South-south trade in capital goods: The market driven diffusion of appropriate technology  <a href="#">Raphie Kaplinsky</a>, Rebecca Hanlin</p>
K	<p><b>Controversies in Technology Policy</b>  Innovation policy at stake: Should we throw the baby with the bath waters or change the composition of the bath waters  <a href="#">Philippe Larédo</a></p> <p>Innovation Theory and Innovation Policy: A Failure of Communication and Interaction  <a href="#">Charles Edquist</a></p> <p>A Solution Looking for a Problem? Promises, Social Reconfigurations, and the “Deficit Model” of Innovation  <a href="#">Joakim Juhl</a>, Sebastian Pfotenbauer</p>
L	<p><b>New Conceptualisations</b>  Mapping and narrating a plurality of publics for socio-technological transformations  <a href="#">Go Yoshizawa</a></p> <p>Serendipity in research and innovation: Towards a taxonomy and a theory  <a href="#">Ohid Yaqub</a></p>

	<p>Additive Manufacturing in Transition: Mobilising framing and overflowing to understand the creation and normalisation of protected spaces Douglas Robinson, Philippe Laredo, Axel Lagnua</p>
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A	<p><b>Dialogue session: 50 years of Science Technology and Innovation policy in Latin America and beyond</b>  Organiser: Matias Ramirez  Panelists: Paloma Bernal, Diego Chavarro, Andrea Laplane Judith Sutz, Gabriela Dutrenit</p>
B	<p><b>Research session: Innovation Systems and Structural Transformation from an Historical Perspective</b>  Organiser: Maria Savona  Chair: Bengt-Ake Lundvall  Discussant: Luc Soete</p> <p>Toward a Taxonomy of National Systems of Innovation System in European and Latin American Countries  <u>Alessandro Nuvolari</u></p> <p>Varieties of Innovation Systems and Structural Changes in Europe: Challenges for the 21st Century”  <u>Maria Savona</u></p> <p>Financial Cycles and Macroeconomic Dynamics  <u>José Antonio Ocampo</u></p>
C	<p><b>Capitalism and regime transformation</b>  Spatial systems of innovation: adapting the national innovation systems approach to the global capitalist dynamics  <u>Juan Carlos Mondragon-Quintana</u></p> <p>Social Innovation and the Creative Destruction of Capitalism: Rethinking Innovation after the Financial Crisis  <u>Kyriaki Papageorgiou</u></p> <p>Innovation policy in the age of transitions  <u>Gijs Diercks, Henrik Larsen, Fred Steward</u></p>
D	<p><b>Research session: Sustainable and inclusive urban infrastructure: a need for a sea change? (2)</b>  <i>Part 2: Sustainable and inclusive urban infrastructure: Decentralised and smart urban experiments?</i>  Organiser: Ralitsa Hiteva, Kat Lovell and Tim Foxon</p> <p>Innovative Decentralised Urban Infrastructure: Key Factors in the Direction of Development  <u>Chris Bouch, Chris Baker, Chris Rogers, Ian Bartle</u></p> <p>Five contradictions of smart-sustainable urbanism  <u>Chris Martin, James Evans, Andrew Karvonen</u></p> <p>Smart City Construction: toward an analytical framework for smart city experimentation  <u>Frans Sengers, Philipp Späth, Rob Raven</u></p>
E	<p><b>Research Session: Investigating uncharted grounds on open innovation: understanding open innovation in SMEs</b>  Organiser: George Tsekouras  Entrepreneurial Experimentation: The importance of spin-off and acquisition of innovative SMEs  Asa Lindholm Dahlstrand, Bo Carlsson, martin Andersson</p> <p>Open innovation ecosystems for entrepreneurs involved in social innovations  <u>John Bessant</u></p> <p>Collaborating with ‘gorillas’ to scale up: challenges, strategies and implications  <u>Vareska van de Vrande</u></p> <p>Managing open innovation projects in SMEs: A conceptual framework and a plan of research  <u>George Tsekouras</u></p>
F	<p><b>Governance of Innovation</b>  Learning and innovation in Developing Economy Clusters: Comparing Private and Non-Profit Intermediaries in cluster governance  <u>Matias Ramirez, Ian Clarke, Laurens Klerkx</u></p>

	<p>Innovation for the global commons: multilateral collaboration and polycentric governance in a heteropolar world <u>Keith Smith</u></p> <p>Governing genetic resources to address global challenges: right intentions; wrong outcomes <u>Catherine Rhodes</u></p>
G	<p><b>Green entrepreneurship, innovation and skills</b> Structure and dynamics of green employment across US metropolitan areas <u>Davide Consoli, <u>Nicolo Barbieri</u></u></p> <p>Energy-efficient innovation and firm size: How different firms respond to different institutional pressures Luca Grilli, Paola Garrone and <u>Boris Mrkajic</u></p> <p>Green Technology Based Firms (GTBF): Business as Usual? <u>Pelin Demirel, Giuliana Battisti</u></p>
H	<p><b>Flirting with knowledge</b> It takes more than two to tango: Building up linkages between Non High-tech SMEs and Universities <u>George Tsekouras, Andre de Campus</u></p> <p>Seduced into collaboration: A resource-based choice experiment to explain knowledge acquisition strategies of SMEs <u>Frank J. van Rijnsoever, Sander N. Kempkes, Maryse Chappin</u></p> <p>Global Mismatch in Knowledge Production <u>Patrick Gaule, Ruchir Agarwal</u></p>
I	<p><b>Entrepreneurial States</b> Mission-oriented policies: a new framework applied to the case of Brazil's Inova programme <u>Mariana Mazzucato, <u>Caetano Penna</u></u></p> <p>Public Entrepreneurship: Dynamic Collaborative Governance for Social Innovation <u>Christopher S. Hayter, Albert Link</u></p> <p>The role of State Investment Banks in enabling low-carbon technological change <u>Anne Geddes, Tobias S. Schmidt</u></p>
J	<p><b>Renewable energy session</b> Global development trajectories in the wind and solar photovoltaics sector: how technology related differences shape the dynamics of international knowledge transfer <u>Rainer Quitzow, Joern Huenteler</u></p> <p>Technological knowledge networks in China: the case of PV Technology <u>Iciar Dominguez Lacasa, Mahmood Shubbak</u></p> <p>The green fling: Market volatility in incumbent industries and sustainability transitions in an oil-fuelled economy <u>Jakoba Sraml Gonzalez, Tuukka Makitie, Keith Smith &amp; <u>Taran Thune</u></u></p>
K	<p><b>Big Data as a Tool for Mapping Innovation</b> Innovation Policy-making In the Big Data Era <u>Hasan Bakhshi, Juan Mateos-Garcia, Stian Westlake</u></p> <p>Evidence of big data value for broadcasters: A qualitative analysis on R&amp;D projects from BBC and NHK <u>Santiago Ruiz-Navas, Kumiko Miyazaki</u></p> <p>Economic and Technological Complexity: A Model Study of Indicators of Knowledge-based Innovation Systems <u>Inga Ivanova, Øivind Strand, Duncan Kushnir, Loet Leydesdorff</u></p>
L	<p><b>Medical Innovation</b> Brazilian research networks in dengue: evidence for policy and planning <u>Bruna de Paula Fonseca</u></p> <p>Network heterogeneity, scientific performance and medical innovation</p>

Oscar Llopis, Maureen McKelvey, Irene Ramos-Vielba, Alfredo Yegros, Pablo D'Este

When author becomes inventors: an empirical analysis on patent-paper-pairs in medical research  
Arianna Martinelli, Elena Romito

A	<p><b>University-industry tech transfer</b>          University characteristics and the creation of high-growth spin-offs. An empirical investigation of the UK.  <u>Ugo Rizzo</u>, Francesco Rentocchini, Laura Ramaciotti</p> <p>Exclusive or Open? An Economic Analysis of University Intellectual Property Licensing Strategies          Sila Öcalan-Özel, Julien Penin</p>
B	<p><b>R&amp;D, productivity and structural change</b>          Sector dynamics and firms demographics of top R&amp;D investors in the global economy  <u>Pietro Moncada-Paternò Castello</u></p> <p>The Compositional Nature of Productivity Slowdown  <u>Simone Vannuccini</u>, Uwe Cantner, Holger Graf</p>
C	<p><b>Innovation Systems</b>          Global Innovation Systems: A framework for technological innovation in transnational contexts          Christian Binz, <u>Bernhard Truffer</u>, Lars Coenen</p> <p>Re-casting the innovation systems 'net' through experiences with energy system change  <u>Alexandra Mallett</u></p>
D	<p><b>Technological trajectories</b>          Patterns of technological diffusion: evidence from patent data  <u>Petros Gkotsis</u>, Antonio Vezzani</p> <p>Mapping research priorities and their relation to societal needs over time. The case of rice research since the '80s  <u>Tommaso Ciarli</u>, Ismael Rafols</p>
E	<p><b>Transitions in Education</b>          Integrating Responsible Research and Innovation (RRI) into scientific training: learning lessons across borders, UK and Brazil          Christopher Till, <u>André Sica de Campos</u>, Emma Frow, <u>Janaina Pamplona da Costa</u>, Margarita Staykova, Sara Wilford</p> <p>Grassroots Up-scaling of Transition Experiments: Insights from Action Research on Campus Sustainability (2009 – 2016)  <u>Zeeda Fatimah Mohamad</u></p>
F	<p><b>Science Policy</b>          Model Answers  <u>Paul Nightingale</u></p> <p>Is Science Policy a Policy Science?  <u>Caroline Wagner</u></p>
G	<p><b>Organisations and Innovation</b>          Succession and family business innovation: Case of machinery manufacturing sector in Ankara  <u>Merve Gül Barut</u>, Semih Akcomak, Çağrı Topal</p> <p>Adoption and Re-adaptation of management practices: the paradox of abandon          Rosane Argou Marques, Isabel Maria Bodas Freitas</p>
H	<p><b>Cross-section interactions</b>          Analyzing interdependent systemic problems for the diffusion of clean innovations in the Dutch concrete industry          Alexander van der Vooren, <u>Joeri H. Wesseling</u></p> <p>Cross-sectoral technological knowledge building and exploitation in the functional food industrial convergence: Empirical Study from Japanese Functional Food Industry  <u>Paveena Lalitnorasate</u>, Kumiko Miyazaki</p>
I	<p><b>Natural resource management and technological capabilities</b></p>



	<p>Natural resource diversity and Knowledge idiosyncrasies. Implications for resource intensive development paths and sustainability transitions  Allan Dahl Anderson, <u>Olav Wicken</u></p> <p>Sustainable management of natural resources via enhancing knowledge base: experiences from Latin American countries  Michiko Iizuka, <u>Fernando Vargas Cuevas</u>, Jakob Baumann</p>
J	<p><b>Policy mixes and change</b>  Alignment of innovation objectives in the policy mix  <u>Isabel Maria Bodas Freitas</u></p> <p>Designing Policy Mixes for Transformative Changes: Towards a Common Framework  <u>Sebastian Sewerin</u>, Tobias S. Schmidt</p>
K	<p><b>Development income trap</b>  Trapped in the middle. Development, R&amp;D and the national innovation system.  <u>Diana Suárez</u>, Analía Erbes</p> <p>Korea's innovation system transition at the crossroad: System failure or Post Catch-up?  <u>Jae-Yong Choung</u>, Hye-ran Hwang</p>
L	<p><b>Follow up session to Panel 3 - Dialogue session: The work of the IPSP</b>  Saurabh Arora, Social Progress a Compass  Raphie Kaplinsky, Markets, Finance and Corporations: Does Capitalism has a Future  Judith Sutz, Inequality and Social Progress</p>

Thursday 8 September, Session 4. 15.45-16.45

A	<p><b>Returns to labour and R&amp;D</b>          European high-growth innovative firms: how do they grow?          Maria Del Sorbo, Daniel Vertesy</p> <p>Economies of skill of R&amp;D intensive firms. Breaking the law of diminishing marginal returns to labour  <u>Sara Amoroso</u></p>
B	<p><b>Direction and organisation of research funding</b>          R&amp;D policy based on goals: when the reality does not meet expectations  <u>Adão Carvalho</u></p> <p>Funding transformative research: ESRC's challenge to conservatism in peer review  <u>Peter Kolarz, Erik Arnold</u></p>
C	<p><b>Politics of inclusion</b>          The Politics of Inclusion: Decentralizing Science, Technology and Innovation for Regional Development in Colombia  <u>Elisa Arond</u></p> <p>Including indigenous communities in ICTs innovation: The case of first nations in Northern Canada  <u>Martha Burkle</u></p>
D	<p><b>Transition Regimes and Competences</b>          Competences for sustainability transitions – the Climate-KIC Transitions Hub  <u>Fred Steward, Cristian Matti, Andreas Huck</u></p> <p>Global socio-technical regimes  <u>Lea Fuenfschilling, Christian Binz</u></p>
E	<p><b>GVC governance, development and catching up</b>          Small farmers' technological learning in berries for export markets  <u>Cecilia Ibarra, Matias Ramirez</u></p> <p>Sustainability Transition and Technological Catch-Up Guidance of search as a strategic mechanism for leapfrogging  <u>Xiao-Shan Yap, Bernhard Truffer</u></p>
F	<p><b>Building Futures</b>          Transformative futures of research and innovation. a meta-analysis of two scenario-building exercises  <u>K. Matthias Weber, Stephanie Daimer</u></p> <p>The contrasted delineation of futures. The case of agroecological transition in France.  <u>Marc Barbier, Sébastien Treyer, Jessica Thomas, Sarah Lumbroso</u></p>
G	<p><b>Green innovation: the firm perspective</b>          External support for Resource efficiency measures adoption: An empirical analysis on European SMEs          Isabel Maria Bodas Freitas, <u>Nicoletta Corrocher</u></p> <p>Opportunities for eco-innovation: Identifying actors and underlying knowledge bases in the Netherlands  <u>Floortje Alkemade, Carolina Castaldi, Onder Nomaler</u></p>
H	<p><b>Cognitive Proximity, Learning and Innovation</b>          Spirituality and network-based learning: the mediating effect of cultural compatibility, creativity, and identity          Federica Ceci, Francesca Masciarelli, Andrea Prencipe</p> <p>Don't Talk to Strangers? Cognitive Proximity, Social Proximity and the Productivity of Mobile Inventors  <u>Rasmus Bode, Guido Buenstorf and Dominik P. Heinisch</u></p>
I	<p><b>Micro-innovation and development</b></p>

	<p>The Role of Social Capital for Creating Value in Mobile Money Systems  <u>Addisu Lashitew</u></p> <p>Cursed is the ground because of you - Religion, Ethnicity, and the Adoption of Fertilizers in rural Ethiopia  Marco Guerzoni, <u>Alexander Jordan</u></p>
J	<p><b>Medical Innovation</b>  Innovation in health care: the contributions of hospital employees to research- and practice-based innovations  Taran Thune, <u>Magnus Gulbrandsen</u></p> <p>Knowledge-intensive consumer services: Case study evidence on the growth of innovative global healthcare tradables  <u>Cátia Costa</u>, Sandro Mendonça</p>
K	<p><b>STI Funding</b>  Innovation in Times of Financialization: Does Financialization Enhance the Lack of Future-oriented Innovations in Co-ordinated Market Economies? The Example of Germany  <u>Katrin Hahn</u></p> <p>STI policies, national innovation system and framework conditions: Their impacts on innovation performance in Hungary  <u>Attila Havas</u></p>

A	<p><b>Dialogue Session: Science Fiction and Innovation: Who is leading the Dance?</b>  Organiser: Ed Steinmueller, Daniele Archibugi  Chair: Saurabh Arora, SPRU  Panelists: Daniele Archibugi, Caroline Bassett, Ralitsa Hiteva, Ed Steinmueller, Caroline Bassett</p>
B	<p><b>Dialogue Session: Local production of medicines in LMICs: how can it promote innovative capabilities for resilient and responsive health systems in changing African contexts?</b>  Organiser: Geoffrey Banda  Chair: Maureen Mackintosh  Panelists: Joana Chataway, Dinar Kale, Julius Mugwagwa, Geoffrey Banda</p>
C	<p><b>Research session: Sustainable and inclusive urban infrastructure: a need for a sea change? (3)</b>  <i>Part 3: Sustainable and inclusive urban infrastructure: critical perspectives on infrastructure governance</i>  Organisers: Ralitsa Hiteva, Kat Lovell, Tim Foxon</p> <p>What governance innovations are needed to enable infrastructure development contribute to the creation of sustainable and inclusive cities?  <u>Tom Dolan</u></p> <p>Value Creation and Capture for a Low Carbon Infrastructure  <u>Ralitsa Hiteva</u>, Tim Foxon, Kat Lovell</p> <p>How transitions may derail: Lessons from innovation and infrastructure history  <u>Erik van der Vleuten</u></p>
D	<p><b>Research session: The role of hospitals in innovation</b>  Organiser: Ewan Ferlie, Bryn Lander  Commentator: Magnus Gulbrandsen  Chair: Piera Morlacchi</p> <p>Bench to bedside? Boundaries and innovation in academic health science centres  Catherine French, Ewan Ferlie, Naomi Fulop</p> <p>At your service Clinical practice innovation in hospitals  Bryn Lander</p> <p>Buying health? Mobilizing hospital procurement for sustainable innovation  Fiona Alice Miller, Pascale Lehoux</p>
E	<p><b>Research session: Direction and pace of green technology innovation: What do we need to know about finance and policy to influence it?</b>  Organiser and Chair: Gregor Semieniuk  Discussant: Ariel Wirkierman</p> <p>Capitalism, technology and a green global golden age: The role of history in helping to shape the future  <u>Carlota Perez</u></p> <p>Is Going Green Remaining Brown? Directed Technical Change and the Policy Mix in Energy Innovation  <u>Lionel Nesta</u></p> <p>Financing renewable energy: Who is financing what and why it matters  <u>Mariana Mazzucato</u></p>
F	<p><b>Urban Transformations</b>  Transforming Innovation for Urban Sustainability: An International Comparison of Technological Innovation Systems of Smart Cities  <u>Masaru Yarime</u></p> <p>Where to transition to? A full cost framework to analyse a transition from centralised to decentralised urban waste</p>

	<p>water infrastructure  <u>Sven Eggimann</u>, Bernhard Truffer, Max Maureer</p> <p>Innovation in Relocalization in the local food system: Understandings of Sustainability and Urban Agriculture connections in the policymaking process.  <u>Daphne Page</u></p>
G	<p><b>Technology Drivers</b>  Reformulating rationales for public procurement for innovation (PPI) policies: insights from the China- - Brazil Earth Resources Satellite (CBERS) Programme  <u>Milton de Chagas Freitas</u>, André Sica de Campos, Janaina Pamplona, André Furtado</p> <p>Tailoring innovation policies to technology-specific learning patterns: An analysis of knowledge feedbacks in three clean energy technology innovation systems  <u>Tobias Schmidt</u></p> <p>Tech to social or social to tech: path dependency and the birth of a new entrepreneurial genre.  Mario Calderini, Veronica Chiodo, Mattia Corbetta</p>
H	<p><b>Opening ICTs</b>  Situating Open Government Data: A crossroads in government-citizen relationships?  <u>Daniel J. Paré</u></p> <p>Technological cycles and ICT revolution: evidence from patent data  <u>Marianna Epicoco</u></p> <p>Open Innovation: revealing and engagement in Open Data organisations  Franz Huber, Francesco Rentocchini and <u>Thomas Wainwright</u></p>
I	<p><b>Academic spinouts and knowledge transfer</b>  Upstream versus Downstream Antecedents of Academic Entrepreneurship: Are Scientific Discoveries or Interaction with Users that Matter?  Irene Ramos-Vielba, Pablo D’Este, Mabel Sánchez-Barrioluengo, Alfredo Yegros</p> <p>The strategic orientation of Universities in knowledge transfer activities  <u>Paola Giuri</u>, Alessandra Scandura, Federico Munari, Laura Toschi</p> <p>Academic spin-offs: counting beans or extracting value?  <u>Francesco Rentocchini</u>, Mario Benassi , Matteo Landoni</p>
J	<p><b>Agricultural Innovation</b>  Agro-ecological innovation: fitting or transforming the dominant agro-food system?  <u>Les Levidow</u></p> <p>Impact assessments of genetically engineered crops: Informing or forming technological choices?  <u>Patrick van Zwanenberg</u>, Anabel Marin</p> <p>The structural change on rice agriculture system in Japan by the introducing policy of innovation  <u>Shingen Yamamoto</u>, Yutaka Takahashi</p>
K	<p><b>Social Innovations</b>  Innovation as a Political Process of Development: Are Neo-Schumpeterians Value Neutral?  <u>Theo Papaioannou</u>, Smita Srinivas</p> <p>The humanization of the economy through transformative social innovation, countering processes of marketization and bureaucracy  <u>René Kemp</u>, Tim Strasser, Marc Davidson, Paul Weaver, Julia Backhaus, Bonno Pel, Flor Avelino, Alex Haxeltine, Adina Dumitru</p> <p>Plural Future/s: Enacting Critical and Speculative Design at the Policy-Publics Interface  <u>Georgina Voss</u>, Justin Pickard, Tobias Revell</p>

L	<p><b>Medical Innovation 2</b>          Designing technologies for sustainable healthcare systems: Articulating a new research agenda on responsible innovation in health  <u>Pascale Lehoux</u></p> <p>Co-Creation in Innovation -Towards a theory of co-creation in converging health innovations  <u>Ellen Moors</u></p> <p>Do Funding Sources Complement? The Case of the UK Cancer Research  <u>Daniele Rotolo, Michael Hopkins, Nicola Grassano</u></p>
M	<p><b>Green Entrepreneurship, Innovation and Skills</b>          Better Late Than Never: A longitudinal quantile regression approach to the interplay of firm growth, green technology and age          Riccardo Leoncini, Alberto Marzucchi, Sandro Montresor, Francesco Rentocchini, Ugo Rizzo</p> <p>Environmental Regulation and Green Skills: an empirical exploration  <u>Davide Consoli, Francesco Vona, Giovanni Marin and David Popp</u></p> <p>Hierarchical Process of Innovation Policy Change - A Study of China's Transition towards Clean Mobility  <u>Lei Xu, Jun Su</u></p>

**Friday 9 September, Session 6. 11.00-12.30**

A	<p><b>Dialogue session: Learning innovation agencies and entrepreneurial ecosystems</b>  Organiser: José Manuel Leceta  Chair: José Manuel Leceta  Panelists: Ben Martin, Charles Edquist, Francisco Marín, Josep M. Pique, Mariana Mazzucato</p>
B	<p><b>Dialogue session: Innovation in healthcare delivery – is competition a good thing? The role of the private sector in driving innovation in clinical services</b>  Organiser: Peter Varnai, Maike Rentel  Panelists: TBC</p>
C	<p><b>Research session: Intermediary actors in innovation and energy system transition (1)</b>  Organisers and Chairs: Paula Kivimaa, Anna Bergek  Commentator: Wouter Boon</p> <p>Mapping formal intermediaries in renewable electricity production in Sweden: methodological challenges, empirical findings and conceptual implications  <u>Dr. Anna Bergek</u>, Ingrid Mignon, Johanna Nählinder</p> <p>Do intermediary organisations challenge the incumbent?  <u>Dr. Kaisa Matschoss</u>, Eva Heiskanen</p> <p>Intermediating towards transformative change in the building sector – experiences from UK low energy housing case studies  <u>Dr. Mari Martiskainen</u>, Paula Kivimaa</p>
D	<p><b>Research session: The Interaction between Innovation, Employment, Inequality, and the Environment Contrasting Evolutionary Models on Global Challenges (1)</b>  Organiser: Tommaso Ciarli  Chairs: Giovanni Dosi and Richard Nelson  Commentators: Andrea Roventini and Tim Foxon</p> <p>When more Flexibility Yields more Fragility: the Microfoundations of Keynesian Aggregate Unemployment  <u>Maria Enrica Virgillito</u></p> <p>Faraway, So Close: An Agent-Based Model for Climate, Energy and Macroeconomic Policy  <u>Francesco Lamperti</u></p> <p>An Evolutionary Model of the Risk-Reward Mechanism in the Innovation-Inequality Relationship  <u>Ariel Luis Wirkierman</u></p>
E	<p><b>Innovation in Knowledge Intensive and Creative Sectors</b>  Knowledge intensive entrepreneurship: going beyond the Schumpeterian entrepreneur  <u>Maureen McKelvey</u>, Franco Malerba</p> <p>The statistical reality of the creative industries: defining a rigorous standard  <u>Alan Freeman</u>, Hasan Bakhshi, John Davies and Peter Higgs</p> <p>Competitive Moves during Disruptiveness: A Study of Digitization in the Dutch Music Industry  <u>Amber Geurts</u>, Thijs Broekhuizen and Wilfred Dolfsma</p>
F	<p><b>Standard, Regulation and Innovation</b>  Epistemic Jurisdiction and its Problems: Sustainability Standards in Global Administrative Spaces  <u>David Winickoff</u>, Matthieu Mondou</p> <p>Platforms and Standards: An Historical Perspective  <u>Ed Steinmueller</u></p> <p>Stabilizing and De-Stabilizing Toxic Regimes: Experts, Law and Agriculture Politics in Greece 1940-2015  <u>Stathis Arapostathis</u></p>

G	<p><b>R&amp;D Responses to External and Internal Pressures</b></p> <p>Technological Search over the business cycle: Do technological competences and financial constraints affect the search strategies of the firms?  <u>Daniela Silvestri</u>, Massimo Riccaboni, Antonio Della Malva</p> <p>The benefit of failure. Does learning-by-failing contribute to successful innovations?  Elena Cefis, <u>Riccardo Leoncini</u></p> <p>The evolutionary roots of adaptive capacity: How the past quirks of an organization’s environment influence its future latitude  <u>Allard van Mossel</u></p>
H	<p><b>Research Funding and Organisations of Science</b></p> <p>Back to basics – revisiting rhetoric of competitive research funding allocation and impact agenda in Sweden  <u>Katarina Larsen</u>, <u>Susanne Nilsson</u></p> <p>Transforming Public Research Organizations in Post-Socialist Poland: Old Limitations and New Routes to Intellectual Renewal  <u>Steffi Heinecke</u></p> <p>From High-Energy Physics to Photon Science. The Transformation of National Laboratories in the United States and Germany.  <u>Thomas Heinze</u></p>
I	<p><b>Inclusive Innovation</b></p> <p>Reflections on analytical challenges of science, technology and innovation policies to deal with poverty problems. A specific reference to Mexico  <u>Rosalba Casas Guerrero</u></p> <p>Frugal innovations: design and architectural perspective  <u>Chaisung Lim</u>, Takahiro Fujimoto</p> <p>Transformative change for an inclusive society: insights from social innovations and implications for innovation policy  <u>Paul M. Weaver</u>, René Kemp, Tim Strasser, Julia Backhaus, Bonno Pel, Flor Avelino</p>
J	<p><b>Community/distributed energy session</b></p> <p>Community energy as institutional innovation: rules, discourses and grassroots agency  <u>Audley Genus</u>, <u>Marfuga Iskandarova</u></p> <p>Distributed Energy Storage Systems: Effects on Demand Volatility  <u>Marco Valente</u>, <u>Tommaso Ciarli</u></p> <p>Service based business models in renewable micro- - generation – What about the impact on local energy autonomy?  <u>Jouni Juntunen</u></p>
K	<p><b>Research Evaluation</b></p> <p>Assessing the Impact of Research and Innovation: An analysis of evidence, metrics and narratives used in REF2014 Business and Management impact case studies  <u>Claire Donovan</u></p> <p>Towards a novel method of research evaluation: tracking proximity change in translational research projects.  <u>Frédérique Lang</u>, Michael Hopkins, Jordi Molas-Gallart, Ismael Rafols, Puay Tang</p> <p>University research system transformation: connecting shifting governance to dynamics of citation distributions  <u>Diana Hicks</u>, <u>Jian Wang</u></p>



A	<p><b>Dialogue session: “Innovating Policy: Transdisciplinary Practice and the Politics of Co-Construction in Policy Labs”</b>  Organiser: Susanna Nascimento  Panelists: Ann Light, Lucy Kimbell, Adrian Smith, Stephane Vincent, Thomas Prehn</p>
B	<p><b>Research session: Innovation and the Creative Economy: Fusion, confusion and the policy challenge</b>  Organiser: Jonathan Sapsed  Chair: Beatrice D’Ippolito  Discussant: Christopher Tucci</p> <p>Creative Digital IT Skills Fusion and its performance effects  Jonathan Sapsed  Juan Mateos Garcia, Paul Nightingale</p> <p>Skills diversity and firm growth: The Complementary role of arts and science skills  Josh Siepel, Roberto Camerani, Monica Masucci</p> <p>Innovation policies for a creative economy: Challenging the dominance of science, technology and innovation (STI) ‘Research’  Bruce Tether, Mickael Benaim</p>
C	<p><b>Research session: Intermediary actors in innovation and energy system transition (2)</b>  Organiser: Paula Kivimaa, Anna Bergek  Commentator: Matias Ramirez</p> <p>Community-based intermediation for local embedding  <u>Jacob Barnes</u></p> <p>Finnish Environment Institute SYKE: Lessons from natural resource management to energy policy intermediation  <u>Dr. Eeva Primmer, Suvi Huttunen</u></p> <p>From a systematic review to a dynamic typology of intermediaries in transitions  <u>Dr. Paula Kivimaa, Wouter Boon, Sampsa Hyysalo, Laurens Klerkx</u></p>
D	<p><b>Research session: The Interaction between Innovation, Employment, Inequality, and the Environment Contrasting Evolutionary Models on Global Challenges (2)</b>  Organiser: Tommaso Ciarli  Chairs: Giovanni Dosi, Richard Nelson  Commentators: Andrea Roventini, Tim Foxon</p> <p>A History-Friendly Model of Structural Change and Productivity Growth: Policies and Divergence in Comparative Perspective  <u>Mario Cimoli</u></p> <p>Be Patient Enough to Wait what You Deserve: Banks’ Time horizons, Borrowing Constraints and the Evolution of Industries  <u>Mauro Napoletano</u></p> <p>Structural Changes and Growth Regimes  <u>André Lorentz</u></p>
E	<p><b>Research session: Building Blocks for a New Innovation Theory addressing Social Change</b>  Organiser: Johan Schot  Commentator: Richard Nelson  Chair Arie Rip (invited)</p> <p>The need for an updated framework for innovation policy  Luc Soete</p> <p>How did we grow apart?  Robin Williams</p>

	<p>Origins and Development Potential of MLP New Innovation Theory addressing Social Needs Frank Geels and Johan Schot</p>
F	<p><b>Infrastructure Innovation</b> Too old to fail? Addressing transformation bottlenecks: Innovation in mature infrastructure sectors <u>Kat Lovell</u></p> <p>The politics of infrastructure pilot projects <u>Harold Rohracher</u>, Thomas Berker</p> <p>Strategies of the main actors related to the diffusion of smart houses in Japan <u>Kumiko Miyazaki</u>, Kentarou Nishida</p>
G	<p><b>Regional and Urban Politics of Innovation</b> Placed-based policies for innovation – A critical assessment of the S3 governance system and the Entrepreneurial Discovery in Eastern Macedonia and Thrace <u>Elisabetta Marinelli</u>, Mark Boden, Patrice Dos Santos, Karel Haegeman</p> <p>Regional innovation systems and transformative change: The case of the chemicals industry in West Sweden <u>Hanna Martin</u></p> <p>An innovation system framework for system innovation policy: the case of Strategic Innovation Programs (SIPs) in Sweden Lars Coenen, Jerker Moodysson, Teis Hansen and Markus Grillitsch</p>
H	<p><b>University-Industry Relations</b> The Retreat of Public Research and its Adverse Consequences on Knowledge, Innovation and Social Welfare <u>Daniele Archibugi</u>, Andrea Filippetti</p> <p>Funding Portfolio for Academic Research: From Additionality of Sources to Production of Science <u>Stefano Bianchini</u>, Patrick Llerena</p> <p>The efficiency of Portuguese Technology Transfer Offices and the importance of university characteristics <u>Aurora A.C. Teixeira</u>, André Monteiro</p>
I	<p><b>MNCs and Innovation in emerging markets</b> The Social Networks of Inventors in Chinese and Indian Multinationals' Cross-border Acquisitions <u>Elisa Giuliani</u>, Arianna Martinelli, Roberta Rabellotti</p> <p>How has the dual embeddedness of the multinational enterprise subsidiaries influenced the development and evolution of the Indian software innovation system? <u>Nidhi Chaudhary</u></p> <p>From leapfrogging of firms to leapfrogging of industries: the effect of outward FDI by emerging market multinationals on home country industrial development <u>Teis Hansen</u>, Ulrich E. Hansen</p>
J	<p><b>Electric mobility</b> Full speed ahead: Challenges and implications of the UK strategy for autonomous vehicle deployment <u>Jean-Paul Skeete</u></p> <p>A Policy Review: Assessing the Development of Electric Vehicles in China Michael Nauruschat, <u>Tong-Yaa Su</u></p> <p>The drivers of green driving: Analyzing the intention to buy electric vehicles in European countries Grazia Cecere, <u>Nicoletta Corrocher</u>, Marco Guerzoni</p>
K	<p><b>Evaluating innovation impact</b> The Returns to Scientific Specialization <u>Orion Penner</u>, Gaétan de Rassenfosse</p>

Mapping private R&D outputs: The contribution of top R&D companies to scientific literature  
Roberto Camerani, Daniele Rotolo, Nicola Grassano

Assessing the quality and impact of scientific research: A comparative analysis of the Global South versus the Global North  
Manuel Godinho, Hugo Confraria, Lili Wang

**Friday 9 September, Session 8. 15.30-17.00**

A	<p><b>Dialogue session: Political Economy of Finance in Technology and Innovation</b>  Organiser: Lucy Baker  Panelists: Tim Foxon, Mariana Mazzucato, Gregor Semieniuk, Stephen Spratt</p>
B	<p><b>Research session: Innovation and industrial performance: firm level analysis</b>  Organiser: Federico Tamagni  Discussant: Angelo Secchi</p> <p>Innovation and the distribution of employment growth: evidence from Spanish micro-data  <u>Flavio Calvino</u></p> <p>What do firms know? What do they produce? A new look at the relationship between patenting profiles and patterns of product diversification  Giovanni Dosi, Marco Grazzi, <u>Daniele Moschella</u></p> <p>Persistence of innovation and patterns of firm growth  <u>Dario Guarascio</u>, Federico Tamagni</p>
C	<p><b>Research session: Learning from failure: Decline, displacement and defeat of process technologies</b>  Organiser: Anne-Marie Coles  Chair and commentator: S R Peters</p> <p>Development, stagnation and decline of process technologies: An observation of the history of two CHP application niches  <u>Anton Sentic</u></p> <p>Range anxiety and electric vehicles: 'battery swapping' as an example of technological and business model experimentation  <u>Ian Clarke</u></p> <p>Dynamics of technology decline: the case of pressed glass manufacturing in England  <u>Athena Piterou</u>, Anne-Marie Coles</p>
D	<p><b>Research session: Framing Innovation and Policy: Reconciling Open and Responsible Innovation</b>  Organiser: John Pearson  Chair: Veikko Ikonen  Commentator: Morten Velsing Nielsen</p> <p>Inclusive Innovation: Recommendations from industry and end-users for RRI  Antonia Bierwirth</p> <p>The Ethics of Open Innovation and Responsible Innovation: Complementarity or Collision Course?  Robert Gianni</p> <p>Responsible Innovation, Open Innovation and Cultural Change  John Pearson</p>
E	<p><b>Consumer interactions</b></p> <p>The Echoes of Bandwagon Through a Complex System of Innovation and Development  <u>João Basilio Pereima</u></p> <p>The Sharing Economy: A Case of "Reverse" Technology Assessment  <u>Koen Frenken</u></p> <p>Adoption and diffusion of shared goods in consumers' coalitions. An agent-based simulation  <u>Francesco Pasimeni</u>, Tommaso Ciarli</p>
F	<p><b>Technology Upgrading</b>  Catching up with the International Oil Firms: A Penrosean view of Upgrading and Innovation Barriers in China's Refining Industry</p>

	<p><u>Damian Tobin</u></p> <p>Mid-tech trap: The case of Automotive Industry in Turkey <u>Semih Akçomak</u>, Serkan Bürken</p> <p>Technology upgrading of middle-income economies: a new framework and evidence Slavo Radosevic, <u>Esin Yoruk</u></p>
G	<p><b>Public foresight and Entrepreneurship</b></p> <p>Entrepreneurial Ecosystems: The Role of Government Alliances as Drivers of Innovation <u>Claudia Doblinger</u>, Kavita Suranaa, Laura Diaz Anadona</p> <p>Institutional intermediation and public procurement. A study of demand-innovation in the development of satellite telecommunications in Italy <u>Matteo Landoni</u></p> <p>Forward looking innovation policy: insights from foresight experts <u>Sofi Kurki</u></p>
H	<p><b>Institutional collaborations and innovation</b></p> <p>Why do firms, universities and governmental bodies collaborate in multidisciplinary research programs? A mixed methods approach to evaluation. <u>Kevin P.F Broecks</u>, Frank J. van Rijnsoever</p> <p>Global Knowledge Spillovers Through Institutional Collaborations Greg Morrison, <u>Massimo Riccaboni</u>, <u>Fabio Pammolli</u></p> <p>Time matters: exploring how public research organizations – industry interaction affect firms’ innovation dynamics <u>José Miguel Natera</u>, Gabriela Dutrénit</p>
I	<p><b>International organisation of research</b></p> <p>Intergenerational transfer of scientific knowledge and sustainable development of science <u>Sotaro Shibayama</u></p> <p>Architecting complex international partnerships (CISTIPs) for capacity-building in science, technology, and innovation: A study of four global MIT collaborations <u>Sebastian Pfothenauer</u>, Danielle Wood</p> <p>Inclusive Innovation at the UK’s Department for International Development (DFID) Anke Schwittay, Paul Braund,</p>
J	<p><b>Mining/extractive industries session</b></p> <p>Discovering New Public-Private Partnerships for productive and technological development in emerging mining countries Osvaldo Urzua, <u>Michiko Iizuka</u>, Fernando Vargas-Cuevas, Jakob Baumann, Alejandra Wood</p> <p>How to improve collaboration between industry, government, universities and the community to face industry challenges: the case of the Chilean Mining Programme ‘Alta Ley’ <u>Veronica Roa</u>, Julio González, Jorge Torres</p> <p>Innovation chain theory and the commercialisation of shale gas extraction technology in the US: historical and econometric evidence Isabel Bodas-Freitas, David Grover, <u>Kaboo PY Leung</u></p>
K	<p><b>Critical Evaluation</b></p> <p>Policy considerations for evidence-based measures of complex innovation systems <u>Sylvan Katz</u></p> <p>Who defines professional standards and which indicators are used in bibliometric research evaluation? <u>Arlette Jappe</u></p>

	<p>Old Boys Network: Gender Gap in Science in Japan <u>Aldo Geuna</u></p>
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