

New Research Agendas for Innovation, Science and Technology Policy

8-9 May 2017

Programme

SCIENCE POLICY
RESEARCH UNIT

SPRU
PhD Forum

US
UNIVERSITY
OF SUSSEX

Welcome

Welcome to the University of Sussex and
the 23rd annual SPRU PhD Forum



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Schedule

Day 1

Morning

09:00	Delegate registration	Fulton Foyer
09:40	Welcome remarks Steve McGuire , Head of School, BMEc	Fulton A
09:50	<p style="text-align: center;">International Politics and the Changing Role of the 'Expert' Plenary panel</p> <p><u>Chair</u> Ben Dempsey, Doctoral Researcher, SPRU</p> <p><u>Speakers</u> Gordon Mackerron, Professor of Science & Technology Policy, SPRU Caitriona McLeish, Senior Research Fellow, Harvard Sussex Program/SPRU Kate O'Riordan, Reader in Media, School of Media, Film and Music, Sussex Andy Stirling, Professor of Science & Technology Policy, SPRU</p>	Fulton A
11:15	Closing the first panel Adam Tickell , Vice Chancellor, University of Sussex	Fulton A
11:25	Networking break	Fulton Foyer
11:45	<p style="text-align: center;">Future Research Agendas Plenary panel</p> <p><u>Chair</u> Martha Bloom, Doctoral Researcher, SPRU</p> <p><u>Speakers</u> Ben Martin, Professor of Science & Technology Policy Studies, SPRU Juan Mateos-Garcia, Head of Innovation Mapping, Nesta Anke Schwittay, Senior Lecturer in Anthropology & International Development, School of Global Studies, Sussex Ed Steinmueller, Professor of Information & Communication Technology Policy, SPRU</p>	Fulton A
13:15	Networking lunch	JUB G22

Schedule

Day 1
Afternoon

14:15	Research Discussions <i>This will consist of two sessions of 45 minutes. On each table, the facilitator will introduce two short presentations and then proceed in facilitating a discussion around research in that area.</i>			
Session 1 <i>Select the table most representative of your research and/or interests</i>				
14:15	<u>Table A</u> Digital Technology, Users and Innovation Bryony Parrish Biye Gao <u>Table B</u> Commercialisation and Technology Bernardo Cantone Giovanna Capponi <u>Table C</u> Technology Foresight Garth Williams Deepak Singh	JUB 115	<u>Table D</u> Digital / Physical Space Kat Braybrook Judit Varga <u>Table E</u> Innovation in Energy Erlend Osland Simensen Dan Hdidouan	JUB 118
Session 2 <i>Select the table most representative of your research and/or interests</i>				
15:15	<u>Table A</u> Research, International Development and Accountability Surya Raja Charlie Dobson <u>Table B</u> Innovation Management Jose David Gomez Safa Joudeh <u>Table C</u> User-led and User-focused Innovation Max Dullo Andres Dominguez	JUB 115	<u>Table D</u> Internet Governance Maria Bjarnadottir Abeer Alkhwalidi <u>Table E</u> Science and Technology Policy Armela Dino William Respondevesk	JUB 118
16:00	Closing remarks: Tim Foxon , Professor of Sustainability Transitions, SPRU			JUB 118
17:00	Coach to Brighton			P7
17:30	Meal			The Olive Grove

Schedule

Day 2

Morning

09:00	Opening lecture: <i>Writing the Rules for Europe. The role of the expert in the past and future of European integration</i> Johan Schot , Director, Science and Policy Research Unit (SPRU)		JUB 144	
09:30	Thematic sessions <i>These sessions will give PhD students the opportunity to present their work over 30 minutes slots, with 15 minutes for presenting and 10 minutes for audience questions and feedback</i>			
09:30	Energy Transitions <u>Chair</u> Benjamin Sovacool <u>Speakers</u> Kejia Yang <i>Actor interactions and transformation: development of solar and wind power in China post 2000</i> Marc Hudson <i>Incumbent strategies during politically-charged periods: Australian battles over pricing carbon 1994-2011</i> Blanche Ting <i>Socio-technical transitions from resource base economies</i>	JUB 115	Managing Knowledge and Change <u>Chair</u> Matias Ramirez <u>Speakers</u> Martha Bloom <i>Managing Skills Diversity in the Creative Industries</i> Alexander Ghionis <i>Change and Continuity in the Organisation for Prohibition of Chemical Weapons</i> Joshua Hutton <i>Knowledge Accumulation and Disease Outbreak Response</i>	JUB 155
11:00	Networking break		JUB 118	
11:30	Innovation Management <u>Chair</u> Ben Martin <u>Speakers</u> Jakoba Sraml Gonzalez <i>Innovation in times of crisis: Case study of the supply service companies in the oil and gas industry in Norway</i> Qijun Zhou <i>A critical study of exploration and exploitation in the context of innovation management</i> Amir Ebrahimi Fard <i>Strategies for enhanced network formation in S&T collaboration</i>	JUB 115	Innovation Systems <u>Chair</u> Katherine Lovell <u>Speakers</u> Claudia Obando Rodriguez Adela Conchado <i>Global innovation dynamics in the pursuit of sustainable energy futures</i> Michele Ferretti <i>Building the 'Smart City': unpacking software engineering practices at the interface of Code and Space</i>	JUB 155
13:00	Networking lunch		JUB G22	

Schedule

Day 2

Afternoon

14:00	<p>Economics of Innovation</p> <p><u>Chair</u> Maria Savona & Ariel Wirkierman</p> <p><u>Speakers</u> Mueid Al Raee <i>Innovation Policy and Labour Productivity Growth</i></p> <p>Bohao Li <i>Design as the indicator for innovation and structural transformation</i></p> <p>Filippo Bontadini <i>Backward Linkages, Natural Resource Industries and Knowledge Intensive Business Services</i></p>	JUB 115	<p>Innovation and Collaboration</p> <p><u>Chair</u> Frederique Bone</p> <p><u>Speakers</u> Pavel Gabriel Corillocla Terbullino <i>Building university-industry linkages in developing countries: identifying barriers and the roles of international partners.</i></p> <p>Kyung Ju Han <i>Characteristics of Collaborative Patterns and their Implications for R&D Performance: An empirical study on public R&D projects in the eHealth sector of South Korea</i></p> <p>Andrea Laplane <i>A legal-institutional approach to the distribution of rewards from public investments in innovation: evidence from Brazil</i></p>	JUB 155
15:30	Networking break			JUB 118
16:00	<p>Transformative Change</p> <p><u>Chair</u> Rob Byrne</p> <p><u>Speakers</u> Donal Brown <i>Low carbon residential retrofit in the UK; the potential role of novel business models and finance mechanisms</i></p> <p>Bipashyee Ghosh <i>Transformations in mobility in an Indian megacity</i></p> <p>Joni Karjalainen <i>Transformative energy futures 2050 in Kenya, Tanzania and South Africa – the role of innovations, forerunners and an enabling policy environment</i></p>	JUB 115	<p>Science and Policy</p> <p><u>Chair</u> Michael Hopkins</p> <p><u>Speakers</u> Alessandro Allegra <i>A comparative framework for science advice mechanisms</i></p> <p>Irene Maffini <i>Crowdfunding public private partnerships (PPPs): a new policy tool to finance energy access projects in developing countries?</i></p> <p>Rossella Salandra <i>Knowledge dissemination in clinical trials: exploring influences of institutional support and type of innovation on selective reporting</i></p>	JUB 155
17:30	Closing remarks: Ed Steinmueller , Professor of Information & Communication Technology Policy, SPRU			JUB 115

About SPRU

Founded in 1966 by Christopher Freeman, a pioneer of innovation studies, SPRU was one of the first interdisciplinary research centres in the field of science and technology policy and management.

Today, with over 50 faculty members, SPRU remains at the forefront of new ideas, problem-orientated research, inspiring teaching, and creative, high impact engagement with decision makers across government, business and civil society.

SPRU research addresses pressing global policy agendas, including the future of industrial policy, inclusive economic growth, the politics of scientific expertise, energy policy, security issues, entrepreneurship, and pathways to a more sustainable future. We work across a broad range of sectors including food, energy, healthcare, biotechnology and ICT.

We are driven by a desire to tackle real-world questions, whilst also contributing to a deeper theoretical understanding of how innovation is shaping today's world.

SPRU has been ranked 1st in the UK (7th in the world) by the 'Global Go To Think Tank Index report 2016', in its list of top Science and Technology think tanks and SPRU has featured in the index's Top 10 list every year since 2013.

The University of Sussex has been ranked best in the world for development studies, by the QS World University Rankings 2017, a reflection of the outstanding research conducted at the University.

About the SPRU PhD Forum

In 1994 a small group of third year SPRU PhD students felt there were not enough opportunities for them to present their work to colleagues and peers. To remedy this they set up the first 'DPhil Day', a day dedicated to showcasing PhD research at SPRU. Over the years the event has grown, with the addition of a 'DSkills Day', designed as a second day of skills training for doctoral researchers. Along the way, the annual event was passed on to first year PhD students and it has now become a traditional rite of passage for each new SPRU doctoral cohort to organise this unique, two-day event.

This year, in true SPRU spirit, we have innovated the format to include space for informal presentations, discussions, and networking. We believe this new format will be a constructive way to share our skills and experiences. Alongside this, we have kept the more traditional presentations: we hope that these two approaches will, on balance, provide a space for doctoral students at all stages of their research, and at all levels of confidence, to contribute and participate. To reflect these changes, we have rebranded the event the 'SPRU PhD Forum'.

The Forum is a space to discuss, debate and share ideas, to meet new people and to learn from one another. We sincerely hope that it will be a space where relationships are fostered, where interdisciplinarity is encouraged, and where new perspectives are forged.

Plenary Presenters

Welcome remarks Day 1

Steve McGuire, Professor of Business and Public Policy, **University of Sussex**

Prof. McGuire is head of the School of Business, Management and Economics. His research interests are in the areas of international political economy, international business and corporate political activity. He has a particular interest in the interaction of firms and governments in international trade, and has published a number of papers on the World Trade Organisation. He has also written extensively on technology policy in Europe and the United States. He serves on the editorial boards of two journals, *Business and Politics* and *European Journal of International Management*. He is also a member of the ESRC's Peer Review College.

Closing the first panel Day 1

Adam Tickell

Vice-Chancellor, University of Sussex

Prof. Tickell joined the University of Sussex as its eighth Vice-Chancellor in September 2016. He has previously held roles as Vice-Principal at Royal Holloway and Vice-Principal at the University of Birmingham. He served as Vice Chair of the ESRC Research Grants Board from 2007 to 2010 and from 2002 to 2007 was the Editor of *Transactions*, Institute of British Geographers, one of the top three journals in Geography globally and among the best-cited social science journals. A highly regarded economic geographer, his work in developing new political economic geography is amongst the most influential of his generation. His work has explored finance, English local governance and the politics of ideas.

Closing remarks Day 1

Tim Foxon, Professor of Sustainability Transitions, **SPRU**

In addition to his role as Professor of Sustainability Transition, Prof. Foxon became Head of Doctoral Research at SPRU in January this year. His research explores technological and social factors relating to the innovation of new energy technologies, the co-evolution of technologies and institutions for a transition to a sustainable low carbon economy, and relations and interdependencies between energy use and economic growth. His current research focuses on Realising transition pathways to a UK low carbon electricity system (EPSRC), examining business models for local low carbon infrastructure (EPSRC/ESRC), and the relations between energy use and economic growth.

Opening lecture Day 2

Johan Schot, Director of **SPRU**

Prof. Schot joined the University of Sussex as the Director of SPRU in January 2014. Prior to coming to Sussex, he held academic posts at the Eindhoven University of Technology and University of Twente, Netherlands. He is a Professor in the History of Technology and Sustainability Transitions Studies. His research is wide ranging but has always focused on integrating social science and historical perspectives for a better understanding of the nature and governance of radical socio-technical change. Alongside colleagues at SPRU, he is currently developing a new innovation theory which will address the current crisis of capitalism and a number of key challenges our world is facing. Necessarily the program will theorize the nature, scale and scope of long-term transformative change, and ways of providing directionality to economic growth. The new theory will synthesize insights from economics of innovation, science & technology studies, history of technology, and other relevant fields.

Closing remarks Day 2

Ed Steinmueller, Professor of Information & Communication Technology Policy, **SPRU**

Prof. Steinmueller has been giving the closing address at the SPRU PhD Forum for over 7 years. His summary of the event is always both insightful and thought provoking. Please see page 11 for his profile.

Plenary Panel 1: International Politics and the Changing Role of the ‘Expert’

Gordon MacKerron

Professor Of Science And Technology Policy, **SPRU**

Prof. MacKerron was Director of SPRU from 2008 until the end of 2013. He was previously Director of the Sussex Energy Group at SPRU from April 2005 to November 2008. Prior to this, he spent four years as Associate Director, NERA Economic Consulting, London and had an earlier career for over 20 years at SPRU. He is an economist specialising in energy and environmental economics, with degrees in economics from the Universities of Cambridge and Sussex. His academic career has specialized in the economics and policy issues of electricity and especially nuclear power, in which he has published and broadcast widely.

Caitriona McLeish

Senior Research Fellow, **Harvard Sussex Program/SPRU**

Dr McLeish became co-director of the Harvard Sussex Program on Chemical and Biological Weapons in 2010. Her research interests are centred on the dual use problem in both the chemical and biological warfare environments and how to design effective mechanisms to prevent the misuse of legitimate science and technology. Widely published in the area, her recent work has included analysis of past offensive and defensive chemical and biological warfare programmes; assessments of the impact that contemporary dual use CBW policies are having on the innovative capacity of scientific and industrial communities; and examination of the roles of industry and global civil society in chemical and biological disarmament.

Kate O’Riordan

Reader in Media, **University of Sussex**

Dr O’Riordan’s research is in cultural studies of emerging technologies, from the web in the 1990s to genome editing in 2014. She has authored or edited five books including *The Genome Incorporated: Constructing Biodigital Identity* (Routledge, 2016). Her work on gender, sexuality and digital culture extends to social issues in web design and development, personal media production, digital imaging in medicine, computer gaming, community, social and activist media. More recent work has engaged with issues about other emerging technologies including biotechnology, cloning, genomics and public engagement with science and technology.

Andy Stirling

Professor of Science & Technology Policy, **SPRU**

Formerly Research Director for SPRU (2006-13) and the Sussex Management School (2009-12), Prof. Stirling’s current work involves research and postgraduate teaching on democracy and sustainability in science and technology. Among many projects, he co-directs the IDS-SPRU STEPS Centre, is Deputy Director for the DEFRA-funded joint Surrey-Sussex Research Group on Sustainable Lifestyles, and is the Director of a spin-off University Enterprise on Multicriteria Mapping. He serves on editorial boards for the *Journal of Risk Research*, *Minerva*, *Nature EMBO Reports*, *Technology Analysis and Strategic Management* and *Environmental Innovation and Societal Transition*.



Plenary Panel 2: Future Research Agendas

Ben Martin

Professor of Science & Technology Policy Studies, **SPRU**

Prof. Martin has carried out research for 35 years in the field of science policy, serving as the Principal Investigator or Project Leader on over 50 research projects and commissioned studies. He has been Professor in Science and Technology Policy Studies at SPRU since 1996 and served as Director of SPRU from 1997-2004. He has helped to establish techniques for evaluating scientific laboratories, research programmes and national scientific performance, and was one of the pioneers of the notion of 'technology foresight'. Since 2004, he has been Editor of Research Policy, the leading journal in the field of innovation studies.

Juan Mateos-Garcia

Head of Innovation Mapping, **Nesta**

Prior to joining Nesta, Juan Mateos-Garcia worked as a researcher at SPRU and CENTRIM at the University of Brighton. His role at Nesta involves the use of new data sources and analytical methods to improve innovation policy and practice. Projects he has worked on include: Mapping the UK Games Industry using big data; Next Gen, a review of education and skills for the video games and visual effects industries; and Creative Clusters and Innovation, which created the first geography of the British creative industries. He is currently leading a project to build a data analytics platform to inform innovation policy in Wales.

Anke Schwittay

Senior Lecturer in Anthropology & International Development, **University of Sussex**

Dr Schwittay is the Head of the Department of International Development at the School of Global Studies, Sussex. She has been consulting for the World Bank Institute, the United Nation's Global Alliance for ICT and Development and RedR. She was also the co-founder and Director of Research of the RiOS Institute, a Silicon Valley based research group applying social science and design methods to digital development projects. Her research interests are in alternatives to mainstream development institutions and practices, and she has recently launched a new project that examines the shift towards discourses and practices of innovation in development.

Ed Steinmueller

Professor of Information & Communication Technology Policy, **SPRU**

Prof. Steinmueller has published widely in the field of the industrial economics of information and communication technology industries including integrated circuits, computers, telecommunications, software and the economic, social policy issues of the Information Society. He has also contributed to research in science policy and the economics of basic research. He has been an advisor to several Directorates at the European Commission, the National Academies of Science and Engineering (US), and the Department of Trade and Industry and Office of Telecommunications (UK). He has served as Editor for Research Policy, and was head of Doctoral Research at SPRU until early this year.

Research Discussion Session 1

Digital Technology, Users and Innovation

Table A

Bryony Parrish [1st year PhD, SPRU] *How might user engagement contribute to a low carbon transition in the UK?*

Biye Gao [4th year PhD, SOAS] *Gender, Reproduction and Technology in China*

Facilitator: Kyung Ju Han

Commercialisation and Technology

Table B

Giovanna Capponi [3rd year PhD, Scuola Superiore Sant' Anna] *Protecting intellectual property from inception to commercialization: complementarities and trade-offs among different strategies*

Bernardo Cantone [2nd year PhD, SPRU] *The impact of measurement instrumentation: is LIDAR a General-Purpose technology?*

Facilitator: Pavel Gabriel Corillocla Terbullino

Technology Foresight

Table C

Garth Williams [Masters Student, SPRU] *An assessment of the prominence of Technology Foresight in Science and Technology Policy-Making in the United Kingdom since 1993*

Deepak Singh [4th year PhD, Jawaharlal Nehru University] *Solar Photovoltaic (SPV) in the Indian Energy Innovations System: Foresight Scenarios For 2025*

Facilitator: Charlie Dobson

Digital/ Physical Space

Table D

Kat Braybrook [2nd year PhD, University of Sussex,] *Hacking the Museum, Together? Sites for Digital Making in London's Cultural Institutions*

Judit Varga [1st year PhD, University of Nottingham] *Explorations into the Journey of Georeferenced Social Data*

Facilitator: Martha Bloom

Innovation in Energy

Table E

Erlend Osland Simensen [3rd year PhD, University of Oslo] *Innovation in upstream oil and gas - distributed technology development in a profitable industry*

Daniel Hdidouan [2nd year PhD, Imperial College London] *The impact of Climate Change on Renewable Power Systems*

Facilitator: Kejia Yang



Research Discussion Session 2

Research, International Development and Accountability

Table A

Surya Raja [4th year PhD, University of Southampton] *Accounting, Accountability and Cooperative Identity in Indonesia*

Charlie Dobson [1st year PhD, SPRU] *Interests, actors and discourses in the development of research agendas: the shaping of research programmes designed to create usable knowledge for sustainable development*

Facilitator: Alexander Ghionis

Innovation Management

Table B

Jose David Gomez [1st year PhD, University of Edinburgh] *Time, expectations and the future in action in Ecuador's Yachay*

Safa Joudeh [1st year PhD, SOAS] *Assessing reterritorialization strategies in Egypt and Tunisia*

Facilitator: Claudia Obando Rodriguez

User-led and User-focused Innovation

Table C

Maximilian Dullo [2nd year PhD, University Wurzburg] *Involving user communities: how knowledge of customer needs and user insights drives innovation in China*

Andres Dominguez [1st year PhD, University of Edinburgh] *User-led innovation in the Internet of Things*

Facilitator: Bryony Parrish

Internet Governance

Table D

Maria Bjarnadottir [2nd year PhD, University of Sussex] *Does the internet limit human rights protection?*

Abeer Alkhwalidi [1st year PhD, University of Bradford] *Factors Affecting The Electronic Government Implementation In Developing Countries Using Cloud Services: Jordan As Case Study*

Facilitator: Irene Maffini

Science and Technology Policy

Table E

Armela Dino [2nd year PhD, UCL] *Evaluation of innovative science policy instruments: showcase from Spain and Latin America/ Africa*

William Respondeusk [Master Student, SPRU] *Building a financial instrument portfolio to fund innovation - an insight into debt/equity hybrids*

Facilitator: Anna Watson



Energy Transitions

Kejia Yang, 1st year PhD, SPRU

Actor interactions and transformation: development of solar and wind power in China post 2000

Recently wind and solar power developed vary fast in China, with the installed capacity of wind power doubled and solar power five-fold during the last three years. China now has the largest installed capacity and the largest manufacturing industry of both wind and solar power in the world. Why the deployment of solar and wind power happened rapidly in China in the last few years? According to transition studies, with the lock in and path dependency problem, the destabilization of established socio-technical system would involve a broad range of actors and typically unfolds over considerable time spans (e.g. 25 years and above). How to explain the rapid development of solar and wind power in China from actors' perspective? What are different actors' motivations and strategies towards transition? To answer the above question, this study will try to break down actors into new entrants and incumbent actors, which are characterised with different motivations towards transformative change according to sustainability transition literature, to see how they use different strategies to influence the technological change and institutional environment during the process. Based on the empirical studies of solar and wind power development in Chinese electricity system since 2000, this study will choose two provinces as cases to offer a more actor-oriented approach to providing a better understanding of what actors can adopt which kind of strategies to promote or inhibit sustainability transition.

Marc Hudson, 3rd year PhD, University of Manchester

Incumbent strategies during politically-charged periods: Australian battles over pricing carbon 1994-2011

I am examining the political, economic and cultural strategies used by incumbents (industry, government and civil society actors) to stop, slow down or shape policies which would potentially assist a socio-technical transition away from high-carbon energy sources towards lower carbon energy. Australia is a particularly relevant case since in 2014 it became the first nation to repeal legislation which had put a price on carbon dioxide emissions. Since then, Australian political and economic elites have struggled to create a coherent policy mix which will address the energy trilemma – of energy security, energy affordability and decarbonisation. My theoretical lens is two-fold. Firstly, I use Kingdon's 'Multiple Streams Approach' to public policy to identify the ebbs and flows of attention and action within the thirty year period under study. I then use Lawrence and Suddaby's 'institutional work' framework to explore the actions and interactions of shifting coalitions which seek to shape policies towards their own advantage. I have carried out archival research and conducted interviews covering the entire 30 year history of Australian climate politics. I have decided to focus on three periods of high contestation around a price on carbon – a 1994/5 battle over a relatively modest carbon tax which has largely been forgotten but which reveals important strategies used by incumbents which, I argue, created path dependencies. My second and third periods cover the attempts between 2008 and 2012 by the Labor government to introduce an emissions trading scheme. This effort cost the careers of two Prime Ministers and similarly cost two Opposition leaders their jobs. Despite the repeal of the legislation, the issue of has not gone away, and indeed has become a fixture on the macro-political agenda, with important lessons for other states pursuing a legislated carbon price.

Blanche Ting, 3rd year PhD, SPRU

Socio-technical transitions from resource base economies

This paper explores the mechanisms by which niches are able to contest stable incumbents in a manner that redirects existing institutional arrangements. By using the Multi-Level Perspective (MLP) as a framework, niches are often described in literature as bottom up emerging radical innovations that are able to displace resistant socio-technical regimes. The detailed relations on how niches links or confronts a stable regime that can lead to a transition is an under studied topic. The prevailing view is that niches are protected, nurtured and scaled up to the extent that is able to destabilize a regime. There are also researchers that investigate if niches are indeed the source of creative destruction leading to structural change or are simply creative accumulation which is absorbed within a regime. This paper seeks to demonstrate that niches can weaken a regime in stepwise gradual changes by way of exploiting existing institutions for its own gains. By combining the MLP with Streeck and Thelen (2005) mode of gradual institutional changes, this research demonstrated that conversion was a useful tool in understanding the importance of reinterpretation of rules. This study evaluated South Africa's Gas Independent Power Producers Programme (IPPP) and the Gas Industrialization strategy. The institutional mode of conversion shows that the gas community in South Africa are orientating themselves in a way that aligns to the momentum of a successful IPPP. The gas IPPP clearly showed that existing institutions can be applied to serve new ends. Thus, niches, which may have similarities to incumbents, do not necessarily have to start afresh but could reconfigure and draw strengths from existing organizational networks and capabilities. This could also mean that, some niches may be able to gain traction faster than others.

Managing Knowledge and Change

Martha Bloom, 1st year PhD, SPRU

Managing Skills Diversity in the Creative Industries

The aim of this thesis is to investigate how different skillsets are integrated into firms in the Creative Industries. Increasingly there is an understanding that both creative and technological skills are necessary for creative work, and that combining creative and technological skills in Creative Industries firms lead to greater innovation. Yet there is an impression that Creative Industries workers are either 'Luvvies' or 'Geeks', creative or technologically skilled employees, and that bringing together these two different skillsets is potentially problematic. The Creative Industries are one of the fastest growing sectors of the UK economy, with the most recent figures showing GVA growing at almost twice the rate of the UK economy as a whole and employment in this sector rising by 15.8% since 2011. Many reports have suggested that academic and economic investment in skills for the Creative Industries is necessary to ensure the economic sustainability of this increasingly important sector and both creative and technological skills shortages in the Creative Industries are becoming a growing concern for policy makers. However, acquiring skilled workers is insufficient without the ability for organisations to effectively exploit the knowledge that skilled workers bring to the firm. Investment in creative and technological skills is therefore insufficient to support the Creative Industries unless we understand how these skills are used in practice; how knowledge is transferred between skills diverse employees and how this knowledge is embedded at the firm level. This research will utilise a capabilities theoretical framework in assessing the processes by which skills diverse employees are integrated into firms in the Creative Industries. It will draw on concepts from the resource based view of the firm (RBV) and knowledge management. The findings of the study will not only contribute to these literatures, but will provide empirical evidence that can be used to guide policy at a local and national level, as well as decision making within Creative Industries firms themselves.

Alexander Ghionis, 1st year PhD, SPRU

Change and continuity in the Organisation for Prohibition of Chemical Weapons

The Chemical Weapons Convention (CWC), and its implementing body the Organisation for the Prohibition of Chemical Weapons (OPCW), has instigated and overseen the verified destruction of 94% of the world's declared chemical weapon stockpile. 98% of the global population are, in theory, protected by their States' membership to the Convention. The OPCW was awarded the Nobel Peace Prize in 2013 in recognition of its efforts to these ends. However, there have been a growing number of allegations of use of chemical weapons over the last six years most notably during the Syrian civil war (Ghouta on 21 August 2013, and more recently in Khan Shaykhun on 4 April 2017). Other allegations of use have also emerged. On 13 February 2017 it was alleged that Kim Jong-nam, half-brother of North Korean leader Kim Jong-un, was assassinated by VX-agent in a Malaysian airport. There have also been unconfirmed allegations of use in Sudan in 2016. On one hand, the regime against chemical weapons appears to be successful, inasmuch as declared state stockpiles are being destroyed (albeit more slowly than predicted). On the other hand, there are allegations of use which can undermine the perceived efficacy of a treaty regime which boasts 192 members: is there a gap emerging between what the OPCW is currently doing in support of CWC implementation and what needs to be done to secure its fulfilment? Thus, this research sets out to understand what change essentially is in the context of the OPCW, why it is occurring, how it is being shaped and framed, and how it is being managed. The answers to these questions provide the opportunity to make an informed prognosis about the health of the organisation and the CWC as it faces uncertain terrain today and in the future.

Joshua Hutton, 3rd year PhD, SPRU

Knowledge Accumulation and Disease Outbreak Response

This research asks questions of how knowledge is produced in outbreak response. Looking at the 2014 Ebola crisis, and using a post-structural approach to policy analysis, the thesis uses documentary and interview data to analyse two so-called 'lessons learned' reports. The thesis aims to open up the univocal accounts presented in the reports and recommendations, to demonstrate their contestability, and to explore the report construction process as a means to reinforcing hegemony.

Innovation Management

Jakoba Sraml Gonzalez, 3rd year PhD, University of Oslo

Innovation in times of crisis: Case study of the supply service companies in the oil and gas industry in Norway

The topic of my PhD thesis is innovation in crisis – how new things are made in an extreme deviation from normality. I am specifically interested in how innovation comes out of crisis: how and why companies sustain innovation and start new innovation efforts. I look at crisis within the oil and gas industry after the collapse of oil prices in mid-2014. I take the perspective of the supplier companies and look closely at their innovation efforts and how they have changed. I approach innovation in crisis from three dimensions. In the first article I look at how companies adapt capabilities to contribute to collaborative innovation processes in the industry. In the second article I look at the technology development aspect of innovation – the strategic technology choices in relation to the changes in the environment. In the third article I look how a company adapts its innovation strategy to new user needs after the crisis. The main method is semi-structured interviews with management and R&D staff at several supply service companies based on the Norwegian continental shelf. The first article is based on interviews with supply service companies. The second article is based on an in-depth study of a high-tech supply service company (interviews, internal documents). The third article is an in-depth case study of another supply service company (interviews).

Qijun Zhou, 2nd year PhD, University of Glasgow

A critical study of exploration and exploitation in the context of innovation management

Existing studies on exploration and exploitation are mainly underpinned by the March (1991) philosophy of discussing these two concepts separately. Interestingly, this notion has not been challenged for innovation management since its conceptualisation. However, there is no reason to continue building research on this notion, whereas arguments still exist regarding which method is the best approach in balancing exploration and exploitation. As a result, this research will differ from the existing literature and study exploration and exploitation from a new angle. This study is underpinned by the alternative premise that exploration and exploitation are not two separate concepts, and hence, they should be considered as not separated. Based on that, the importance of this research firmly lies in the new angle of viewing this argument. If the assumption of separating exploration and exploitation is proven correct, future research focus may stay to improve the current method of forming ambidextrous organisations to manage innovation. However, if the assumption is proven wrong, new perspectives of inseparable should be considered and theoretical framework based on that can be developed. In addition, the new perspectives of these two concepts might lead to a better understanding of innovation, which is likely to make a significant contribution to both theoretical and practical aspects. Considering the core issues that needed to be addressed, it is necessary for integrating different level of analysis, this research will be following a mixed method approach, with quantitative modelling based on external level and qualitative method based on internal level within the selected industry. Field work location is not limited before the research starts, and will be evaluated throughout the empirical stage of the research. By conducting such research design, quantitative data of a large sample can be well linked with details in case companies. As a result, the performance of a selected company will be presented in external analysis, also, the actual decision and process within the company will be captured. The comparison of both result in external and internal level of analysis will provide direct evidence on the notion of exploration and exploitation. Also, this design will also capture the outcome of certain decision made by the company and how this is reflected on the capability frontier.

Amir Ebrahimi Fard, 1st year PhD, TU Delft

Strategies for enhanced network formation in S&T collaboration

Collaboration is a process in which autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationships. Collaboration can happen at three levels: micro, meso, and macro. Two remarkable cases of collaboration are scientific and inter-firm collaboration. Scientific collaboration emerges when scholars from the same or different disciplines gather to carry out a research on a particular problem. Inter-firm collaboration is more or less the same. The difference is that collaboration between the firms has several specific shapes like joint venture and franchising, to name a few. In literature, several typologies for inter-firm collaboration have been suggested. This research chooses the typology proposed by Inkpan and Tsang which is based on “the amount of value chain coverage” and “the orientation of collaboration to have structure”. Based on this model, three important shapes of collaboration between firms are intracorporated network, strategic alliance and industrial district (ID). They also used Nahapiet and Ghoshal framework to explain the transfer of knowledge in these three collaboration types. This idea makes me think deeply about S&T collaboration in network types and how it can be done in inter-firm collaboration. Based on this main idea, S&T collaboration in network types, and inter-firm collaboration and ID consist the boundary of this research.

Innovation Systems

Claudia Obando Rodriguez, 1st year PhD, SPRU

Diversification in developing countries, what do transitions bring to the discussion?

This research aims to understand how regional innovation policy is addressed and implemented in a middle income country like Colombia, and to what extent this can contribute to regional industrial diversification. Traditional focus on regional diversification through related variety assumes that regions generate new economic activities related to what is already produced and the current set of firms' capabilities. Sectorial approaches to explain industrial organisation, such as clusters and Global Production Networks have been widely adopted in developing countries aimed to generate externalities and help firms enter into international and competitive markets and support upgrading. Nevertheless, they focus on specialization and less on diversification. A final approach comes from regional innovation studies through Regional Innovation Systems (RIS), where regular interaction between innovative networks underpinned by a learning and productive culture enhance economic evolution in the long term. These assumptions make it difficult to explain regional diversification in Colombia, where few regions exhibit enough variety and economic structure is characterized by Micro, Small and Medium Enterprises with low capabilities, weak linkages and institutional inertia that make innovation a less systematic process. A potentially useful approach comes from transitions literature, through niches. Under institutional lock-in and vested interests, changes need to be introduced in a way that can be protected from established routines and practices in market. Niches emerge out of a process of bricolage and alignment, by which a variety of actors possessing distributed resources, power and capabilities come together purposefully in order to create new disruptive paths of industrial activities.

Adela Conchado, 4th year PhD, Comillas University

Global innovation dynamics in the pursuit of sustainable energy futures

Policies that try to promote innovation in renewable technologies have become widespread, with countries contributing to them in different ways, and being able to realize different benefits. Understanding how innovation outcomes get distributed can be crucial both to clarify expectations of countries' innovation policies and to look for cross-national solutions to climate change. Yet, we lack frameworks that help us to understand how innovation activities and their associated outcomes get distributed across countries, and which do so in a way consistent with the pursuit of sustainability. I would like to introduce the Outcome-oriented Innovation Framework (OoIF) specifically conceived for that. OoIF is a highly-visual framework that integrates insights from the literature on innovation systems, innovation economics and sustainability transitions. In the presentation I would describe OoIF's structure and dynamics, and show how we have applied it to analyze the distribution of innovation activities across countries in the case of solar PV and wind technologies. We offer an indicator-based representation of innovation dynamics by country in the period 2000-2013, and discuss the importance of cross-national relationships using evidence from previous studies. These cases illustrate how the outcomes that countries have been able to capture from innovation in renewables vary in time and depend to a large extent on global dynamics. From the perspective of a country, this implies that national innovation policies targeting renewables should carefully consider the position of the country in the global innovation landscape, both to define policy expectations and to incorporate initiatives to better take advantage of transnational dynamics. From a global perspective, if the collective goal is to accelerate the transition towards cleaner energy systems, we need to make the global innovation system work as effectively as possible while ensuring viable paths for countries. In this regard, there seems to be great potential in cross-national collaboration, and indeed some initiatives following the 2030 Agenda for Sustainable Development and the Paris Climate Change Conference seem to be moving in this direction.

Michele Ferretti, 2nd year PhD, King's College London

Building the 'Smart City': unpacking software engineering practices at the interface of Code and Space

Recent critical scholarship has begun to consider a deeper level of engagement with the Smart City discourse, focusing on the Actual Cities in which smart technologies are being embedded. While targeting different aspects, each critical attempt is a reminder that Smart Cities ought to be interpreted through the lens of their historical and socio-political contents, rather than be examined on the basis of a few exceptional examples, such as the often-cited Songdo, Masdar and Living PlanIT Valley (Shelton et al., 2014). As pointed out by authors such as Rob Kitchin, there is a need for more in-depth, empirical case studies, able to unpack "smart" socio-technical data assemblages, and contrast smart initiatives across a broader range of "actually existing" cities. In the vein of a recent strand of literature (Datta, 2015; Gabrys, 2014; Shelton et al., 2014) moving beyond dichotomous views on smart technologies as either "celebrative" or "always critical" (Vanolo, 2016), my research advocates thus for a grounding of the critical debate by focusing on the actual Cities, Companies and in particular Coding practices behind the Smart City rhetoric. It does so by the means of empirical evidence derived from a round of ethnographically-informed fieldwork conducted at IBM Research Ireland, and analysed through the lens of Science and Technology Studies (STS).

Economics of Innovation

Mueid Al Raei, 3rd year PhD, **United Nations University / Maastricht University**
Innovation Policy and Labour Productivity Growth

This work examines the relationship between labour productivity growth in nontraditional sectors and “innovation policy” for a cross-section of countries. Innovation policy is characterized by investments in tertiary education and research and development as a percentage of Gross Domestic Product (GDP), the freedom in the business environment, as well as overall government effectiveness. Our results confirm the economic convergence between richer and poorer countries. We could show a significant positive effect of the interaction between government effectiveness and government expenditures in tertiary education as a percent of GDP on labour productivity growth in non-traditional sectors. Also, for developing countries, a positive and significant relationship between the growth variable and effective research and development expenditures was observed. We could not uncover a relationship between other innovation policies and labour productivity growth. Non-traditional sector labour productivity growth in the oil rich Arabian Gulf countries was observed to be consistently slower than western countries. Higher oil prices appear to crowd-out innovation in oil-rich countries while stimulating innovation in oil importing countries.

Bohao Li, 3rd year PhD, **Cambridge**
Design as the indicator for innovation and structural transformation

This research aims to understand the impact of industrial design as the indicator in capturing relevant aspects of the innovation process and structural change in middle-income countries. The paper chose South Korea and Brazil as in depth case studies based on industrial design registration data as well as international trade data on design-intensive goods and services. The study shows that those countries who successfully escaped the middle-income trap demonstrated strong performance in terms of industrial design registration and design-intensive goods exports whereas those who stuck in the middle-income trap underperformed. This study thus formulates the ‘Design-intensive product space framework for growth and development’ which provides a result – oriental capacity building economic development analysis tool focusing on internationally traded goods and services that produced from those industries with an above-average use of registered design and registered trademark per employee. It could then assist developing countries escaping the middle-income trap.

Filippo Bontadini, 3rd year PhD, **SPRU**
Backward linkages, Natural Resource Industries and Knowledge Intensive Business Services

This paper explores whether backward linkages generating from the natural resource industries (NRI) can foster the emergence of new sectors and, ultimately, the diversification of countries’ export. A relatively established fact in the literature on economic development and export structure is that as countries develop, they move from an export portfolio very concentrated on a few commodities, towards more diversified export structures including an increasing number of complex products and services. Export diversification seems particularly important for countries rich in natural resources (NR). This is partly due to the idea of a natural resource curse, based on the fact that countries rich in NR usually often experience poor economic performance, which has become dominant in the literature. The resource curse view has however been challenged by a growing literature, from both theoretical and empirical points of view. Within the broad debate that has ensued, we focus in this paper on the fact that while export diversification seems to be key to economic development, NR specialisation is often argued to be an obstacle to achieving such goal, due to its few linkages to the rest of the economy. This paper contributes to the debate on NR and their relation to other sectors by (i) providing new quantitative evidence challenging the view of NR as an enclave sector, and (ii) in particular reviving the relevance of intermediate domestic linkages à la Hirschmann as a determinant of countries’ export. So, our central hypothesis is that large NR industries can generate a large domestic intermediate demand favouring the development of upstream sectors, which become able to compete on the international market and generate new sources of export. We look in particular at backward linkages between NR industries and knowledge intensive business services (KIBS), although we also test our hypothesis for the manufacturing sector. We test our hypothesis in a dynamical panel framework, using the OECD inter-country input-output tables to compute NR industries’ intermediate demand as well as export in value added of the KIBS and manufacturing sectors. We find the intermediate demand coming from NR industries have a significant and positive effect on the export of KIBS in countries with a revealed comparative advantage in NR. Interestingly, we also find a weaker though positive and significant effect on manufacturing export, regardless of the size the NR sector.

Innovation and Collaboration

Pavel Gabriel Corillocla Terbullino, 1st year PhD, SPRU

Building university-industry linkages in developing countries: identifying barriers and the roles of international partners

The aim of this study is to understand the dynamics of university-industry linkages (UILs) in weak National Systems of Innovation (NSI) – specifically Latin American and Caribbean countries – in two interconnected aspects. The first one is concerned with what kind of barriers universities and firms face when interacting with each other. The second issue is how these actors overcome those barriers and how international research and technology centres contribute to that process. This study is based on a specific scheme called Centres of Excellence (CoE) in Peru and Chile. In both countries governments have been making efforts to promote innovation and have launched similar CoE programmes, the aims of which are to strengthen their NSI and foster innovation through UILs, with the particular support from international research and technology institutions. The engagement of these international institutions is intended to allow local actors access new technologies, knowledge and sources of knowledge. UIL barriers and how they are dealt within LAC has been understudied, and schemes such as CoE, which are relatively new in most of those countries, gives us an opportunity to generate evidence about the process of building UILs and to identify the contribution of international partners, from stronger NSIs, in this process. Findings of this study are also expected to have significant policy implications.

Kyung Ju Han, 1st year PhD, SPRU

Characteristics of Collaborative Patterns and their Implications for R&D Performance: An empirical study on public R&D projects in the eHealth sector of South Korea

Collaborative interaction such as inter-organisational collaborations across boundaries among internal and external users, disciplines, actors, researchers from various innovation spheres is to become more important in a knowledge-based economy, which is accelerated by the ICT development. In the meanwhile, demographic changes due to the ageing population have an impact on the increasing healthcare expenditures, undermining the expectation of universal health coverage, whereas the notion of the personalised-medicine has been spread as a result of the rapid development of the healthcare-related technologies such as eHealth. However, little attention has been paid to understanding the characteristics of collaboration and its performance in the eHealth sector. Therefore, understanding the characteristics of collaboration for developing intellectual capabilities and its implications for performance in this sector plays a significant role in this context. In other words, this research aims to explore why organisations tend to engage in collaboration, what the characteristic of collaboration are, and how the collaboration influences innovative performance in the eHealth sector of Korean public R&D projects.

Andrea Laplane, 3rd year PhD, SPRU

A legal-institutional approach to the distribution of rewards from public investments in innovation: evidence from Brazil

My research explores the relationships between the rationales for innovation policy, the different ways in which the state may seek to share the risks and rewards from innovation with the business sector, and the legal underpinning of these arrangements. Recent studies have suggested that a potential source of dysfunction in innovation systems lies in the structures of appropriability regimes. These may be set up in such a way that rewards from public investments downstream, involving high risks, may be exclusively captured by firms without due remuneration of the state. This has prompted a policy debate on whether, and how, a more active and strategic approach towards the distribution of rewards should be developed, and articulated with the need to tackle contemporary societal challenges. While by and large this debate implies legal concepts such as ‘rights’, ‘property’, and ‘contracts’, little attention has been placed to how law and contract making processes themselves institutionalise policy choices. I build on the ‘innovation systems’, ‘entrepreneurial state’ and ‘legal institutionalism’ literatures to investigate these issues. The thesis follows a multiple case-study methodology within one single country. It relies on empirical evidence gathered primarily through interviews and document analysis complemented by secondary sources. The cases examined comprise a purposefully selected set of state actors in Brazil. I inquire about the types and levels of risks taken, the expected rewards, the motivations behind the attempts to appropriate a direct share of any financial reward, as well as about the contextual conditions in which implementation takes place. My presentation will discuss preliminary findings.

Transformative Change

Donal Brown, 2nd year PhD, SPRU

Low carbon residential retrofit in the UK; the potential role of novel business models and finance mechanisms'

The UK remains a long way from its fourth and fifth carbon budget targets to reduce domestic energy consumption and CO₂ emissions, through the retrofit of residential buildings. This paper outlines how the concept of 'business models' can be a powerful tool for articulating the different elements in the delivery of residential retrofit. Further, the paper introduces 5 distinct retrofit business model archetypes; from the conventional 'atomised market model' towards novel, highly innovative business models; such as the managed energy services agreement (MESA). These emerging business models are characterised by increasingly industrialised and integrated supply chains, a holistic consumer offering and single point of sale, long term energy performance contracts (EPC) and integral project finance. It is argued that whilst the incumbent business model has been suitable for the implementation of single or piecemeal measures, business model innovation will be a necessary pre-condition for the widespread adoption of comprehensive retrofit; as necessitated by the ambitious climate change targets for the sector.

Bipashyee Ghosh, 3rd year PhD, SPRU

Transformations in mobility in an Indian megacity

India is currently witnessing rapid urbanisation, population growth, rising inequality, urban poverty and climate change. Faced with these "grand challenges", the cities and urban centres are now forced to devise new policies, bring in new knowledge, technologies and skill sets in order to address the issues in each of its socio-technical systems. Mobility constitutes one such system, which is one utmost importance in the day to day urban life. In order for Indian cities to remain liveable and equitable, attention towards sustainable and inclusive mobility seems to be of extreme relevance for research from a science and technology policy perspective. The empirical case study for this research is conducted in Kolkata. It is one of the megacities in India - the country's third largest urban agglomeration in terms of its population and is one of the largest "Mega-cities" of the developing world - located in the eastern part of India. This research aims to capture the changing dynamics of mobility of Kolkata, over the past three decades by mapping actors, innovations, routines, regulations and institutions around the key modes of public transport in the city of Kolkata. Data collection methods include semi structured interviews conducted with key policy actors, urban planners, service providers and transport consultants; several historic and recent policy reports reviewed and some statistical operations data collected from primary and secondary sources. Key expected outcomes from this paper is two fold: First, to develop a framework for systematic understanding/measuring regime change through (change of) regime rules. For this, we use dimensions of problem definitions — expectation — solution heuristics in order to trace the limits and the ongoing modification and alteration occurring within the regime . Second, we try to develop a theory around regime transformation and establish its importance in context to the developing world. The paper contributes towards sustainability transitions literature by proposing an alternative theory for understanding and appreciating regime dynamics towards sustainability in developing countries

Joni Karjalainen, 3rd year PhD, University of Turku

Transformative energy futures 2050 in Kenya, Tanzania and South Africa – the role of innovations, forerunners and an enabling policy environment

A 100% renewable energy option is looking increasingly attractive. This research explores how emerging countries should anticipate the possibility of an energy transformation towards an increasing uptake of solar and wind technology. An energy transformation is not merely a technological issue, it is a socio-cultural issue. A possibly distributed energy production system can drive economic, political, cultural and social changes, including radically new innovations, services, and practices. The research is based on the foresight part of the Neo-Carbon Energy project, funded by Tekes – the Finnish Funding Agency for Innovation. A renewable energy based system implies radically transformative changes in the ways how energy is produced and consumed. Such potential changes need to be anticipated as well as contextualised. One of the foresight tools to examine transformative change is scenario-building. The presentation discusses two issues: 1) what to take into consideration when exploring transformative change with future research tools including scenario methodology; 2) what needs to be taken into account when studying particular regions and countries? The presentation gives an example of a recent international survey used to study the forerunners of renewable energy, with the aid of the transformative scenarios. The research also has used futures workshops, focus group discussions, as well as expert interviews in Kenya, Tanzania and South Africa. By analysing renewable energy pioneers and interpreting weak signals, we may be able to illustrate some of the possible future developments. The research contributes to discussions on how emerging countries should anticipate the increasing uptake of solar and wind technology as well as the policy implications of the 100% renewable energy scenario. Bearing in mind that there are differences for studying energy transition, these questions could be important to understand the role of innovation ecosystems and modes of innovation collaboration, as radical innovations typically seem to be driven by bottom-up dynamics.

Science and Policy

Alessandro Allegra, 1st year PhD, UCL

A comparative framework for science advice mechanisms

My project proposes to investigate the relation between science and policy-making in European countries. Science plays an important role in informing policy-making on a wide range of issues from climate change to the regulation of new technologies. However, studies have shown that the use of science in public decision-making differs among cultures, so that the same scientific premises can lead to different outcomes in different countries. This is especially challenging for the European Union: its central institutions often take scientifically-informed decisions that affect all of its member states, but each has its own individual culture which might have reached different conclusions from the same premises. My project proposes to analyse how different science advisory mechanisms deal differently with such issues. To do so I will employ a theoretical framework to analyse and compare science advice mechanisms. The framework attempts to bring together analytical categories currently found in both the policy and academic literature, as well as empirical features of existing science advice mechanisms. The framework is currently being developed and will soon be validated through application to current and historical cases. Once validated, it will allow critical comparison of different mechanisms to elucidate the differences in the provision of science advice to policymaking in different cultural contexts.

Irene Maffini, 1st year PhD, SPRU

Crowdfunding public private partnerships (PPPs): a new policy tool to finance energy access projects in developing countries?

Access to clean and affordable energy is one of the most critical economic, environmental, and social challenges our nations face today. Approximately 1.2 billion people still have no access to electricity and more than 2.7 billion people rely on the use of biomass for cooking. Affordable and reliable modern energy by 2030 is achievable, but the IEA estimates an investment gap of \$48 billion a year by 2030 to alleviate energy poverty. The private sector, including citizens, have a critical role in financing this gap, but they face significant barriers to engagement with projects offering financial returns, as well as high social and environmental impacts, such as energy access projects in developing countries. Innovative financing mechanisms that address these barriers (e.g. lack of access to a pipeline of projects, high investment risks etc.) are needed to contribute to closing the energy access funding gap by attracting a larger share of the global investable assets. Crowdfunding has emerged as a new financial technology ('fintech') innovation with the potential to catalyse and leverage investment from both public and private sources, and provide societal support for clean energy projects. In her research, Irene will complement the existing theories of mission-oriented policies, with theories on the role of finance, and public private partnerships (PPP) for sustainable development, to build a more comprehensive framework to further investigate the different roles that the state plays in crowdfunding energy access partnerships with private sector and civil society actors. The research goals are to establish whether crowdfunding PPPs are a promising policy tool to catalyse, complement and augment private-sector investment in energy access projects in developing countries and what role the state should play in these partnerships. The core empirical work of the research will focus on two energy access crowdfunding PPPs supported by two international development agencies (DFID and UNDP).

Rossella Salandra, 4th year PhD, Imperial College Business School

Knowledge dissemination in clinical trials: exploring influences of institutional support and type of innovation on selective reporting

This paper contributes to the ongoing debate on transparency in clinical research and more specifically on the selective reporting of research findings. Selective reporting is the publication of only part of the findings originally recorded during a research study, on the basis of the results. This can lead to a number of concerns ranging from the publication of defective scientific knowledge to the skewing of medical evidence. Drawing upon a unique hand-collected dataset, this study provides an empirical exploration of the contextual factors that may be associated with selective reporting. In particular, using the evidence ratings presented in systematic reviews of clinical literature, this study explores whether selective reporting is associated to (1) the source of institutional support and (2) the type of innovation evaluated. The results indicate that the odds of selective reporting are higher for industry funded studies than for publicly funded studies; however this effect is restricted to studies where at least one author is affiliated to industry. In addition, the results suggest that selective reporting is more likely in projects exploring radical innovation, compared to incremental innovation. I also find weak evidence of differences across scientific fields, providing tentative support to the view that bias is more common in "softer" fields.

Campus Map



0 50m 100m

Main buildings

Accelerator Building	49	Health Centre	6
Aisin Seiki	41	Institute of Development Studies (IDS)	19
Arts A	22	John Clifford West	35
Arts B	13	John Maynard Smith	47
Arts C	17	Jubilee	15
Arundel	23	Jubilee Lecture Theatre	15a
Asa Briggs (A1 and A2) Lecture Theatres	21	The Keep	60
Ashdown House	42	Library	20
Attenborough Centre	56	Mantell	32
Boiler House	31	Meeting House	53
Bramber House	13	Pevensey I	52
BSMS Research	45	Pevensey II	50
BSMS Teaching	46	Pevensey III	28
Chichester I	24	Richmond	29
Chichester II	25	Shawcross	23
Chichester III	27	Silverstone	16
Chichester Lecture Theatre	51	Sport Centre	57
Childcare Centre	58	Sussex Health Outcomes Research and Education in Cancer (SHORE-C)	37
Clinical Imaging Sciences Centre (CISC)	39	Sussex House	54
Essex House	12	Sussex Innovation Centre	44
Falmer House	55	Sussex Centre for Language Studies	22
Falmer Sports Complex	36	Thermo-Fluid Mechanics	40
Freeman	43	Research Centre (TFMRC)	30
Friston	33	Trafford Centre	38
Fulton	30	Visitors' car park	VP
Genome Centre	48		
Hastings	34		

Student residences

Brightem	4	Northfield	1
East Slope	5	Norwich House	11
Kent House	8	Park Village	3
Kuilukwinds House	9	Stammer Court	59
Lancaster House	7	Swanborough	14
Lewes Court	2	York House 24-hour reception	10

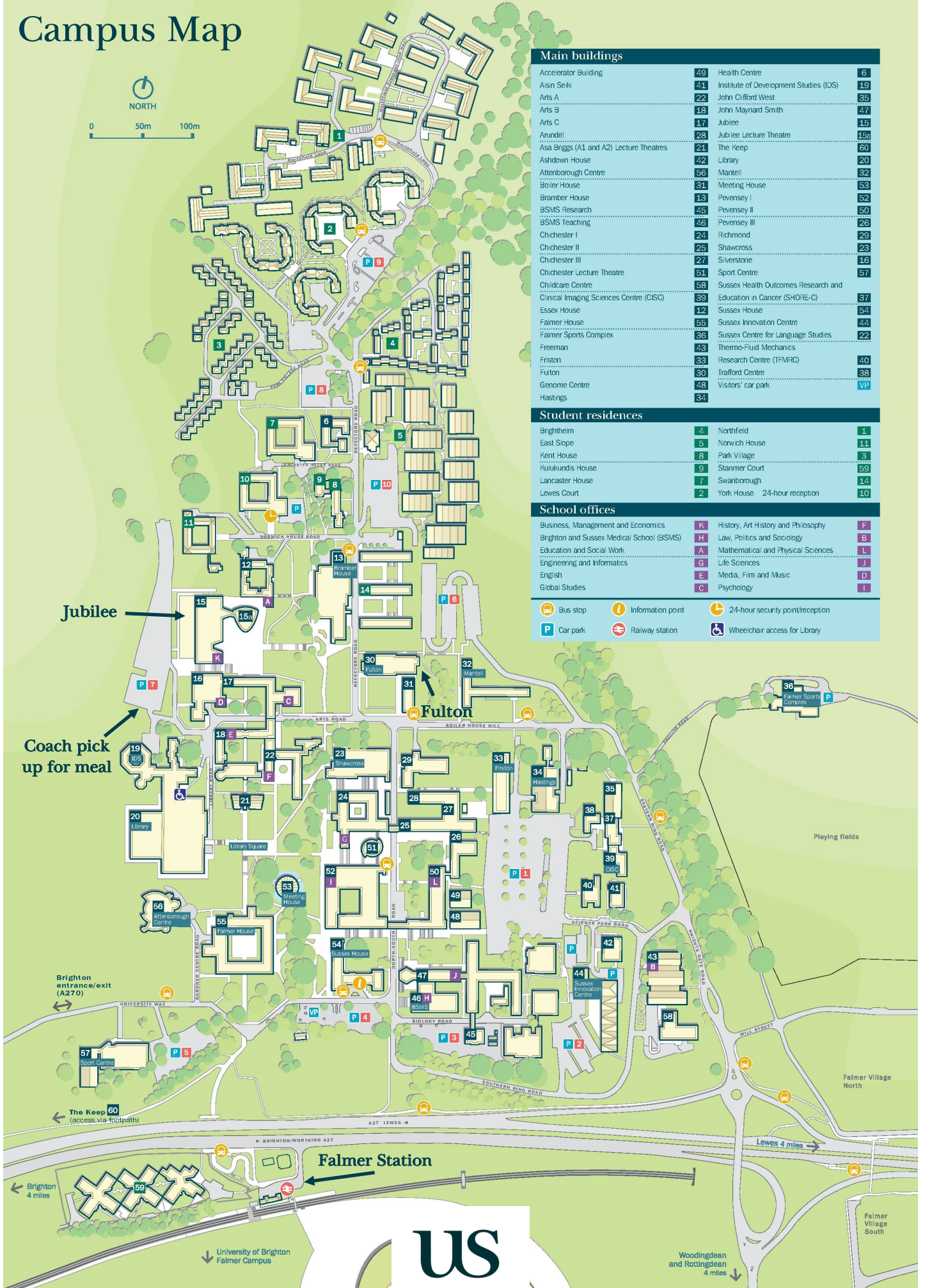
School offices

Business, Management and Economics	K	History, Art History and Philosophy	F
Brighton and Sussex Medical School (BSMS)	H	Law, Politics and Sociology	B
Education and Social Work	A	Mathematical and Physical Sciences	L
Engineering and Informatics	G	Life Sciences	J
English	E	Media, Film and Music	D
Global Studies	C	Psychology	I

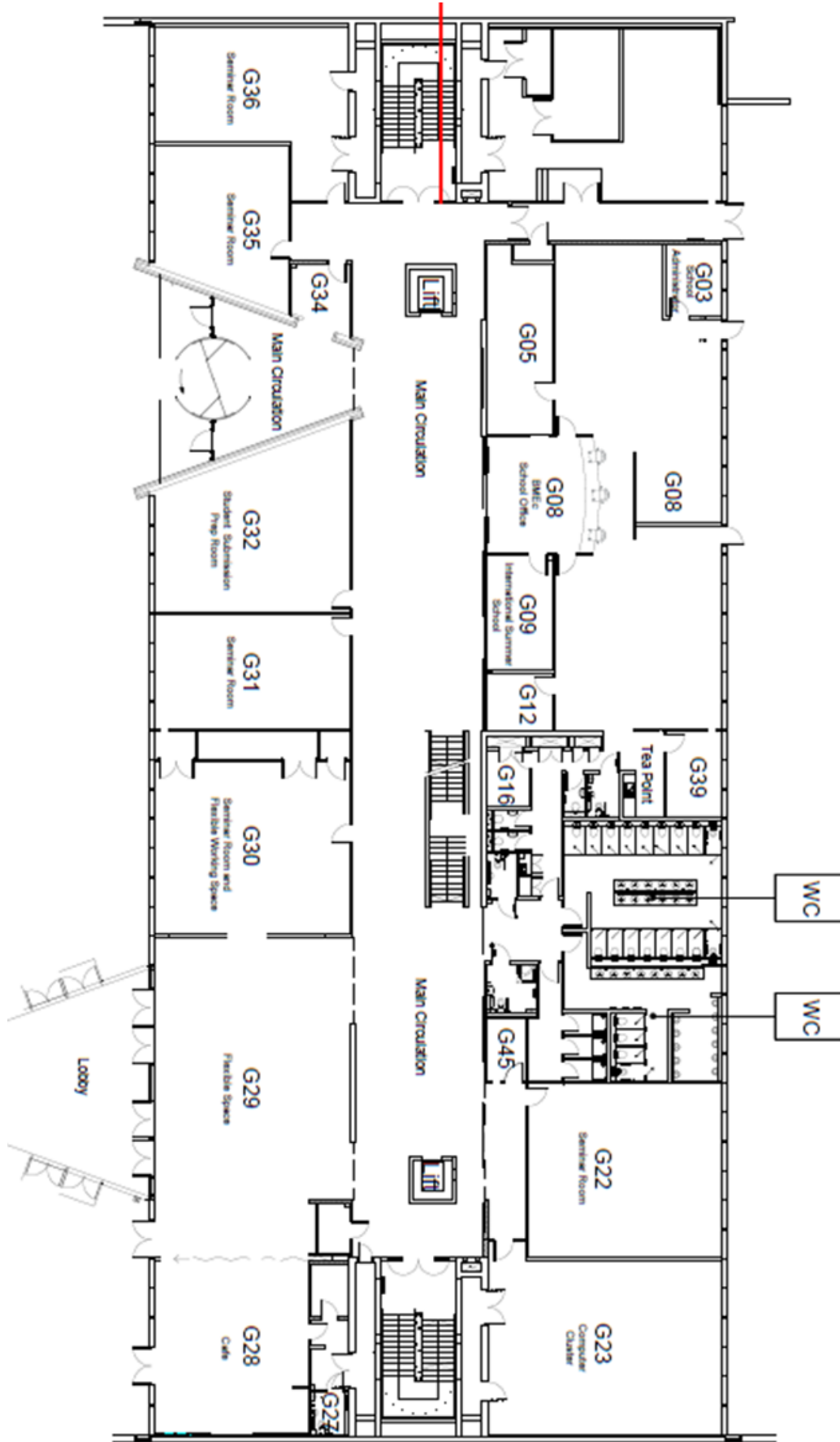
- Bus stop
- Information point
- 24-hour security point/reception
- Car park
- Railway station
- Wheelchair access for Library

Jubilee

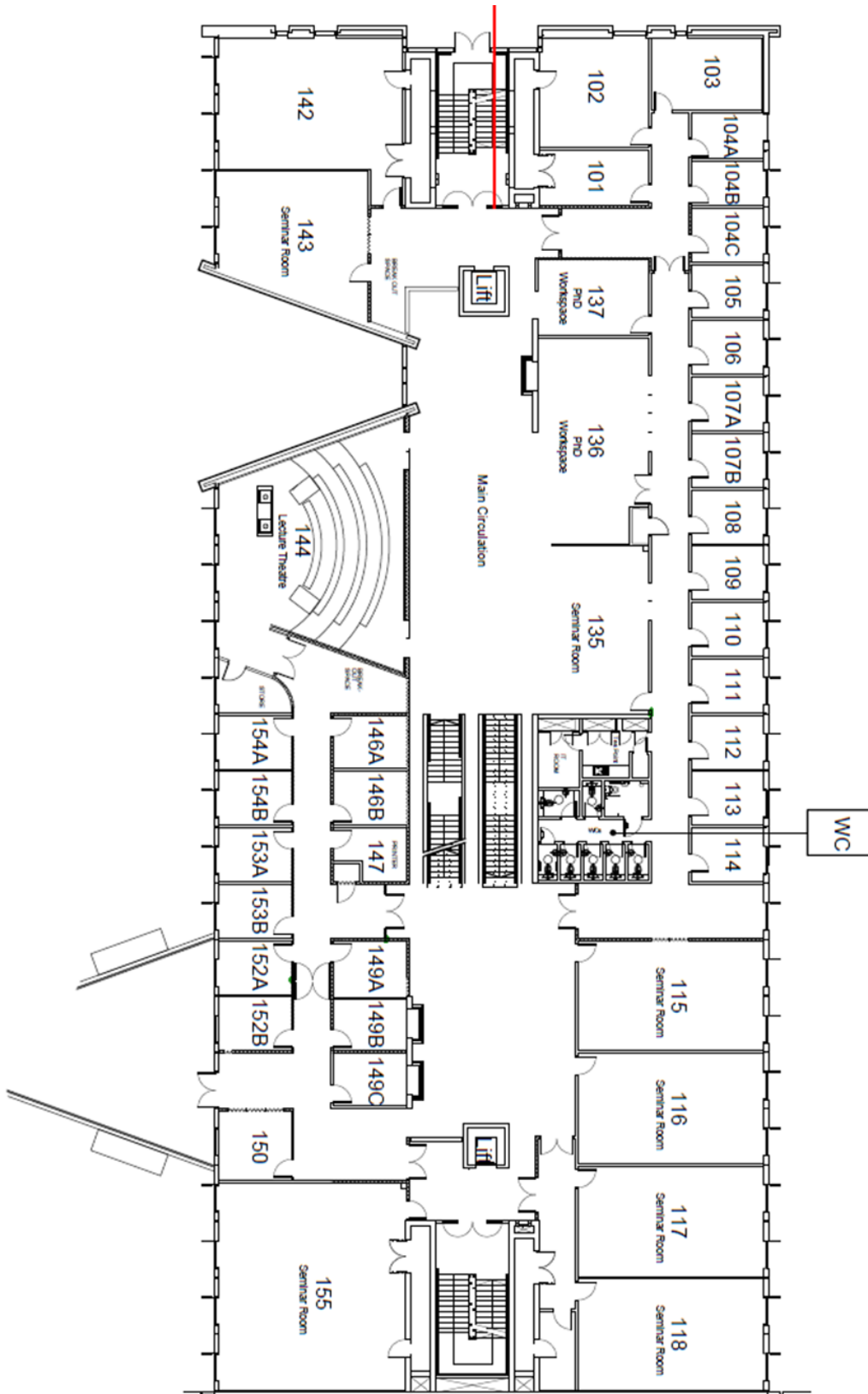
Coach pick up for meal



Jubilee Ground Floor Map



Jubilee First Floor Map



Thank You

We would like to thank you for being part
of the SPRU PhD Forum 2017

We hope to see you again next year!

Don't forget, you can live Tweet the SPRU PhD
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