

8th ZEW/MaCCI Conference on the Economics of Innovation and Patenting

Mannheim, 16-17 May 2019

Conference venue: ZEW, L 7, 1, 68161 Mannheim

PROGRAMME

Thursday, May 16, 2019

09:00	Arrival and Registration
09:30	Room Brussels Welcome Address <i>Georg Licht, ZEW</i>
09:45 – 10:45	Room Brussels Keynote: Measuring Artificial Intelligence <i>DIETMAR HARHOFF, Max Planck Institute for Innovation and Competition, Munich</i> Chair: Georg Licht, ZEW
10:45 – 11:00	Coffee Break
11:00 – 12:30	Parallel Sessions I (see below for details)
12:30 – 13:30	Lunch
13:30 – 15:00	Parallel Sessions II (see below for details)
15:00 – 15:30	Coffee Break
15:30 – 16:45	Room Brussels Invited Session: Innovation and Public Procurement Public Procurement of Innovation: Rationale, Design and Impact <i>ELISABETA IOSSA, University of Rome Tor Vergata and GREEN-Bocconi</i> Procuring Innovation: A European Legislative Reform <i>DIRK CZARNITZKI, KU Leuven and ZEW</i> Chair: Bettina Peters, ZEW
16:45 – 17:00	Coffee Break
17:00 – 18:30	Parallel Sessions III (see below for details)
18:45	Bus Trip to Conference Dinner (Meeting Point: 18:45 ZEW Foyer)
19:30	Conference Dinner at Castle Wachenburg, Weinheim (http://www.wachenburg.de)

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09:00 – 11:00	Parallel Sessions IV (see below for details)
11:00 – 11:20	Coffee Break
11:20 – 12:30	<p>Room Brussels</p> <p>Invited Session: Artificial Intelligence and Big Data in Innovation Research</p> <p>Building an Amazon.com for Data <i>JULIA LANE, New York University</i></p> <p>Using Machine Learning to Study and Support Innovation: Motivation, Methods and Examples <i>JUAN MATEOS-GARCIA, NESTA, London</i></p> <p>Chair: Sandra Gottschalk, ZEW</p>
12:30 – 13:30	Lunch
13:30 – 15:00	Parallel Sessions V (see below for details)
15:00 – 15:20	Coffee Break
15:20 – 16:20	<p>Room Brussels</p> <p>Keynote: FRAND and Patent Damages <i>TIM SIMCOE, Boston University</i></p> <p>Chair: Bernhard Ganglmair, ZEW</p>
16:20	Concluding Remarks <i>Bettina Peters, ZEW</i>
16:30	Farewell Drinks and Pretzels
18:00	Optional: Trip to Heidelberg

11:00 – 12:30 Parallel Session I

Room Brussels I.A: EU Innovation Policy Chair: Rainer Widmann (MPI for Innovation and Competition)	Room 1 I.B: IPRs Chair: Christian Helmers (Santa Clara University)	Room 2 I.C: Science 1 Chair: Fabian Gaessler (MPI for Innovation and Competition)	Heinz-Koenig-Hall (HHK) I.D: Inventors, Firm Size & Innovation Chair: Annette Becker (TU Munich)
Innovation Performance and Signal Effect: Quasi-Experimental Evidence from European Program <i>Nadine Levratto (EconomiX-CNRS) and Aurelien Quignon (EconomiX-CNRS)</i> Discussant: Ilia Samarin (Ghent University)	Visibility of Technology and Cumulative Innovation: Evidence from Trade Secrets Laws <i>Bernhard Gangelmair (ZEW, MaCCI & University of Mannheim), Imke Reimers (Northeastern University)</i> Discussant: Paul Hünermund (Maastricht University)	Publish or Perish: Selective Attrition as an Unifying Explanation for Patterns in Innovation Over the Career <i>Huifeng Yu (University at Albany), Gerald Marschke (University at Albany), Matthew Ross (New York University), Joseph Staudt (U.S. Census Bureau), Bruce Weinberg (Ohio State University & NBER)</i> Discussant: Stefano Baruffaldi (University of Bath)	Incubators, Innovation and Productivity <i>Olof Ejeremo (Lund University & CIRCLE)</i> Discussant: Richard Bräuer (IWH Halle)
Innovation, Subsidies and Heterogeneity in Firm Performance: Evidence from Horizon 2020 <i>Klaas Mulier (Ghent University), Ilia Samarin (Ghent University)</i> Discussant: Øivind A. Nilsen (Norwegian School of Economics)	Post-Grant Review, Invalidation, and Subsequent Patenting <i>Markus Nagler (LMU Munich), Stefan Sorg (MPI for Innovation and Competition)</i> Discussant: Alan Marco (Georgia Tech)	Truly Legendary Freedom: Funding, Incentives, and the Productivity of Scientists <i>Matthias Wilhelm (LMU Munich)</i> Discussant: Felix Poege (MPI for Innovation and Competition)	The Importance of Tacit Knowledge: Dynamic Inventor Activity in the Commercialization Phase <i>Per Maurseth (Norwegian School of Management), Roger Svensson (IFN Stockholm)</i> Discussant: Pere Arqué-Castells (Northwestern University)

Table continues on next page

The Geographic Proximity to European Commission and the Likelihood to be Granted with a Subsidy from EU

Cem Ermagan (KU Leuven) and Dirk Czarnitzki (KU Leuven & ZEW), Peter Teirlinck (KU Leuven)

Discussant: Rainer Widmann (MPI for Innovation and Competition)

Submarine Trademarks

Carsten Fink (WIPO), Andrea Fosfuri (Bocconi University), Christian Helmers (Santa Clara University), Amanda F. Myers (USPTO)

Discussant: Imke Reimers (Northeastern University)

Science Quality and the Value of Inventions

Fabian Gaessler (MPI for Innovation and Competition), Dietmar Harhoff (MPI for Innovation and Competition), Stefano Baruffaldi (MPI for Innovation and Competition), Felix Poege (MPI for Innovation and Competition)

Discussant: Elodie Carpentier (GREThA, CNRS & University of Bordeaux)

Labor Division in R&D? Firm Size and Specialization in Corporate Research

Annette Becker (TU Munich), Hanna Hottenrott (TU Munich)

Discussant: Jeroen Van den Bosch (KU Leuven)

13:30 – 15:00 Parallel Session II

<p>Room Brussels II.A: Public Research Institutes Chair: Maikel Pellens (Ghent University & ZEW)</p>	<p>Room 1 II.B: Patent System Chair: Alexander Donges (University of Mannheim)</p>	<p>Room 2 II.C: International Markets & Innovation Chair: Hanna Hottenrott (TU Munich)</p>	<p>Heinz-Koenig-Hall (HHK) II.D: Web Mining, Deep Learning & Innovation Chair: Jan Kinne (ZEW & University of Salzburg)</p>
<p>Do Companies Benefit from Public Research Organizations? The Impact of the Fraunhofer Society in Germany <i>Diego Comin (Dartmouth College), Georg Licht (ZEW), <u>Maikel Pellens</u> (Ghent University & ZEW), Torben Schubert (Lund University)</i> Discussant: Matthias Wilhelm (LMU Munich)</p>	<p>Strategic Citation: A Reassessment <i>Jeffrey Kuhn (University of North Carolina), Kenneth Younge (EPFL), <u>Alan Marco</u> (Georgia Tech)</i> Discussant: Alexander Donges (University of Mannheim)</p>	<p>Spillovers from International Knowledge Activities <i>Spyros Arvanitis (KOF ETH Zurich), <u>Florian Seliger</u> (KOF ETH Zurich), Martin Wörter (KOF ETH Zurich)</i> Discussant: Bastian Krieger (ZEW)</p>	<p>Firm Website Characteristics and Firm Innovativeness - Which Website Characteristics can Identify whether a Firm is Innovative? <i><u>Janna Axenbeck</u> (ZEW)</i> Discussant: Lorenz Brachtendorf (MPI for Innovation and Competition)</p>
<p>The Innovation Effect of the Introduction of Universities of Applied Sciences: Interdependencies Between Different Types of Research Institutions <i><u>Patrick Lehnert</u> (University of Zurich), Curdin Pfister (University of Zurich), Dietmar Harhoff (MPI for Innovation and Competition), Uschi Backes-Gellner (University of Zurich)</i> Discussant: Elizabeth Webster (Swinburne University of Technology)</p>	<p>Universal Intellectual Property Rights: Too Much of a Good Thing? <i>Emmanuelle Auriol (Toulouse School of Economics), <u>Sara Biancini</u> (Université de Cergy-Pontoise), Rodrigo Paillacar (Université de Cergy-Pontoise)</i> Discussant: Emanuele Tarantino (University of Mannheim)</p>	<p>Competition from China in the Product and Factor Markets and Innovation in Germany <i>Philipp Böing (Peking University & ZEW), Loren Brandt (University of Toronto), <u>Pierre Mohnen</u> (Maastricht University), Elisabeth Müller (German Graduate School of Management and Law)</i> Discussant: Hanna Hottenrott (TU Munich)</p>	<p>Predicting Innovative Firms using Web Mining and Deep Learning <i><u>Jan Kinne</u> (ZEW & University of Salzburg), David Lenz (Justus-Liebig-University Gießen)</i> Discussant: Hector de Wazières (Télécom ParisTech & Dauphine University)</p>
<p>Knowledge Lost in Capital <i><u>Stefano Baruffaldi</u> (University of Bath), Fabian Gaessler (MPI for Innovation and Competition)</i> Discussant: Maikel Pellens (Ghent University & ZEW)</p>	<p>The Consequences of Radical Patent-Regime Change <i><u>Alexander Donges</u> (University of Mannheim), Felix Selgert (University of Bonn)</i> Discussant: Markus Nagler (LMU Munich)</p>	<p>Defining and Measuring the Innovativeness of Firms <i><u>Giuliana Battisti</u> (University of Warwick), Paul Stoneman (University of Warwick)</i> Discussant: Pierre Mohnen (Maastricht University)</p>	<p>Deep Learning, Deep Change? Mapping the Development of the Artificial Intelligence General Purpose Technology <i>Joel Klinger (Nesta), <u>Juan Mateos-Garcia</u> (Nesta), Konstantinos Stathoulopoulos (Nesta)</i> Discussant: Jan Kinne (ZEW & University of Salzburg)</p>

17:00 – 18:30 Parallel Session III

<p>Room Brussels III.A: R&D Policy 1 Chair: Paul Hünermund (Maastricht University)</p>	<p>Room 1 III.B: Standards Chair: Gaéтан de Rassenfosse (EPFL)</p>	<p>Room 2 III.C: Technology Transfer Chair: Patrick Lehnert (University of Zurich)</p>	<p>Heinz-Koenig-Hall (HHK) III.D: Start-ups & Innovation Chair: Lorna Syme (Frankfurt School of Finance and Management)</p>
<p>The Effect of Government Research Grants on Firm Innovation: Theory and Evidence from Austria <i>Rainer Widmann (MPI for Innovation and Competition)</i> Discussant: Roger Svensson (IFN Stockholm)</p>	<p>Approximating the Standard Essentiality of Patents – A Semantics-Based Analysis <i>Lorenz Brachtendorf (MPI for Innovation and Competition), Fabian Gaessler (MPI for Innovation and Competition), Dietmar Harhoff (MPI for Innovation and Competition)</i> Discussant: Maddalena Agnoli (MINES ParisTech)</p>	<p>Public University Research Funding and local University-Firm Cooperation: An Analysis of the German Excellence Initiative <i>Bastian Krieger (ZEW)</i> Discussant: Fabian Gaessler (MPI for Innovation and Competition)</p>	<p>Using AI to Analyze and Predict the Success of Startups When Raising Funds Based on the Characteristics of Their Previous Investors <i>Hector de Wazières (Télécom ParisTech & Dauphine University), Jean-Michel Dalle (Sorbonne Université), Clément Gastaud (Sorbonne Université)</i> Discussant: Marius Berger (ZEW)</p>
<p>Effectiveness and Efficacy of R&D Subsidies: Estimating Treatment Effects with One-sided Noncompliance <i>Philipp Boeing (Peking University & ZEW), Bettina Peters (ZEW, MaCCI & University of Luxembourg)</i> Discussant: Jordi Jaumandreu (Boston University & CEPR)</p>	<p>The Effect of Standardization on Innovation: A Machine Learning Approach <i>Maddalena Agnoli (MINES ParisTech), Petyo Bonev (Swiss Institute for Empirical Economic Research)</i> Discussant: Justus Baron (Northwestern University)</p>	<p>Do University-Industry Collaborative Research Grants Have an Effect on the Industry Partners? <i>Paul Jensen (University of Melbourne), Alfons Palangkaraya (Swinburne University of Technology), Russell Thomson (Swinburne University of Technology), Elizabeth Webster (Swinburne University of Technology)</i> Discussant: Nicolas Carayol (GREThA, CNRS & University of Bordeaux)</p>	<p>Can Owner-Inventors Help Capture Digital Opportunities in Young Firms? <i>Lorna Syme (Frankfurt School of Finance and Management), Elisabeth Müller (German Graduate School of Management and Law)</i> Discussant: Hans Lööf (KTH Stockholm)</p>
<p>The Impact of Internationally Co-Funded Public Technology Transfer Programs on Academic Productivity, Collaboration, and Commercialization <i>Paul Hünermund (Maastricht University), Cindy Lopes Bento (Maastricht University), Maikel Pellens (Ghent University & ZEW)</i> Discussant: Aurelien Quignon (EconomiX-CNRS)</p>	<p>Joining Standards Organizations: The Role of R&D Expenditures, Patents, and Product-Market Position <i>Justus Baron (Northwestern University), Cher Li (University of Nottingham), Shukhrat Nasirov (De Montfort University)</i> Discussant: Gaéтан de Rassenfosse (EPFL)</p>	<p>Public Policy, Learning and the Evolution of Technology Transfer <i>Nicolas Carayol (GREThA, CNRS & University of Bordeaux), Elodie Carpentier (GREThA, CNRS & University of Bordeaux)</i> Discussant: Patrick Lehnert (University of Zurich)</p>	<p>Outside Board Directors and Start-Up Firms' Innovation <i>Christopher Baum (Boston College), Hans Lööf (KTH Stockholm), Andreas Stephan (Jönköping International Business School), Ingrid Viklund-Ros (KTH Stockholm)</i> Discussant: Lorna Syme (Frankfurt School of Finance and Management)</p>

09:00 – 11:00 Parallel Session IV

Room Brussels IV.A: R&D Policy 2 Chair: Christian Rammer (ZEW)	Room 1 IV.B: Technology Markets Chair: Pere Arqué-Castells (Northwestern University)	Room 2 IV.C: Research Cooperation & Networks Chair: Florian Seliger (KOF ETH Zurich)	Heinz-Koenig-Hall (HHK) IV.D: Labor Market & Innovation Chair: Bettina Peters (ZEW)
<p>The Sensitivity of R&D to Financing Constraints of Firms as Well as of Their Banks Before, During and After the Financial Crisis</p> <p><u>Marek Giebel</u> (TU Dortmund), <u>Kornelius Kraft</u> (TU Dortmund)</p> <p>Discussant: Giuliana Battisti (University of Warwick)</p>	<p>Patent Transfers, PAEs and Seller's Innovation Activities. Evidence from the U.S.</p> <p><u>Gianluca Orsatti</u> (University of Bordeaux), <u>Valerio Sterzi</u> (University of Bordeaux)</p> <p>Discussant: Laurie Ciaramella (MPI for Innovation and Competition)</p>	<p>Can You Know Too Much to Learn? The Relationship Btw. Internal Research Capabilities and External Knowledge for Innovation</p> <p><u>Cindy Lopes-Bento</u> (Maastricht University), <u>Markus Simeth</u> (Copenhagen Business School)</p> <p>Discussant: Bart Leten (KU Leuven)</p>	<p>Digitization and the Demand for Physical Works: Evidence from the Google Books Project</p> <p><u>Abhishek Nagaraj</u> (UC Berkeley), <u>Imke Reimers</u> (Northeastern University)</p> <p>Discussant: Bruce Weinberg (Ohio State University & NBER)</p>
<p>Public R&D Support and Firms' Performance</p> <p><u>Øivind A. Nilsen</u> (Norwegian School of Economics), <u>Arvid Raknerud</u> (Statistics Norway), <u>Diana Cristina Iancu</u> (Statistics Norway)</p> <p>Discussant: Philipp Boeing (Peking University & ZEW)</p>	<p>On and Off the Shelf: The Licensing and Selling of Inventions by US Universities</p> <p><u>Federico Caviggioli</u> (Politecnico di Torino), <u>Antonio De Marco</u> (Politecnico di Torino), <u>Fabio Montobbio</u> (Università Cattolica del Sacro Cuore)</p> <p>Discussant: Dirk Czarnitzki (KU Leuven & ZEW)</p>	<p>Coopetition, Formal and Informal Appropriation Mechanisms and the Role of Environmental Dynamism and Competition Intensity</p> <p><u>Nina Karthaus</u> (Maastricht University), <u>Boris Lokshin</u> (Maastricht University), <u>Wilko Letterie</u> (Maastricht University)</p> <p>Discussant: Relinde Colen (Hasselt University)</p>	<p>Labor Supply and Automation Innovation</p> <p><u>Alexander Danzer</u> (KU Eichstätt-Ingolstadt), <u>Carsten Feuerbaum</u> (KU Eichstätt-Ingolstadt), <u>Fabian Gaessler</u> (MPI for Innovation and Competition)</p> <p>Discussant: Bettina Peters (ZEW, MaCCI & University of Luxembourg)</p>

Table continues on next page

<p>Tax Credits and Small Firm R&D Spending <i>Ajay Agrawal (University of Toronto), Carlos Rosell (Canadian Department of Finance), Timothy Simcoe (Boston University & NBER)</i> Discussant: Benjamin Balsmeier (University of Luxembourg)</p>	<p>Distance and the Timing of Licensing <i>Laurie Ciaramella (MPI for Innovation and Competition), Gaétan de Rassenfosse (Swiss Federal Institute of Technology Lausanne)</i> Discussant: Fabio Montobbio (Università Cattolica del Sacro Cuore)</p>	<p>Dynamics in European Research Networks. An Analysis of Dynamics and Transformation in the European Automotive Research <i>Patrick Wolf (ZSW Center for Solar Energy and Hydrogen Research Stuttgart), Tobias Buchmann (ZSW Center for Solar Energy and Hydrogen Research Stuttgart)</i> Discussant: Florian Seliger (KOF ETH Zurich)</p>	<p>Labour Market Reform and Innovation: Evidence from Spain <i>María García-Vega (University of Nottingham), Richard Kneller (University of Nottingham), Joel Stiebale (DICE & Heinrich Heine University Düsseldorf)</i> Discussant: Carsten Feuerbaum (KU Eichstätt-Ingolstadt)</p>
<p>R&D Tax Credits: Mechanisms of Private and Public Value <i>Benjamin Balsmeier (University of Luxembourg), Maria Kurakina (UC Berkeley), Lee Fleming (UC Berkeley), Joel Stiebale (DICE & Heinrich Heine University Düsseldorf)</i> Discussant: Christian Rammer (ZEW)</p>	<p>Measuring the Private and Social Returns to R&D: Unintended Spillovers Versus Technology Markets <i>Pere Arqué-Castells (Northwestern University), Daniel Spulber (Northwestern University)</i> Discussant: Christian Helmers (Santa Clara University)</p>		

13:30 – 15:00 Parallel Session V

Room Brussels V.A: Public Policies Chair: Cindy Lopes-Bento (Maastricht University)	Room 1 V.B: Innovation, Competition & Productivity Chair: Mark Roberts (Pennsylvania State University & NBER)	Room 2 V.C: Knowledge Diffusion Chair: Florence Blandinieres (ZEW)	Heinz-Koenig-Hall (HHK) V.D: Teams/Employees & Innovation Chair: Elisabeth Müller (German Graduate School of Management and Law)
Buyers' Role in Government R&D Procurement <i>Francesco Decarolis (Bocconi University), Gaétan de Rassenfosse (EPFL), <u>Leonardo M. Giuffrida</u> (ZEW), Elisabetta Iossa (University of Rome Tor Vergata), Vincenzo Mollisi (University of Rome Tor Vergata), Emilio Raiteri (EPFL), Giancarlo Spagnolo (SITE-Stockholm School of Economics)</i> Discussant: Gianluca Orsatti (University of Bordeaux)	The Impact of Innovation on Productivity: Profitability and Technical Efficiency <i><u>Leroen Van den Bosch</u> (KU Leuven), Bruno Cassiman (KU Leuven), Joep Konings (KU Leuven), Stijn Vanormelingen (KU Leuven)</i> Discussant: Markus Trunschke (ZEW)	A Firm Scientific Community <i>Stefano Baruffaldi (University of Bath), <u>Felix Pöge</u> (MPI for Innovation and Competition)</i> Discussant: Stijn Kelchtermans (KU Leuven)	Is Assortative Matching to Blame for Slowing Technology Diffusion? <i>Eric Bartelsman (VU Amsterdam), <u>Richard Bräuer</u> (IWH Halle)</i> Discussant: Olof Ejerme (Lund University & CIRCLE)
R&D and Market Size: Who Benefits from Orphan Drug Regulation? <i>Simona Gamba (University of Verona), <u>Laura Magazzini</u> (University of Verona), Paolo Pertile (University of Verona)</i> Discussant: Van Anh Vuong (Maastricht University)	Prices Under Innovation: Evidence from Manufacturing Firms <i><u>Jordi Jaumandreu</u> (Boston University & CEPR), Shuheng Lin (Xiamen University)</i> Discussant: Maria Garcia-Vegas (University of Nottingham)	Knowledge Diffusion Through the Patent System: Evidence from the Invention Secrecy Act <i><u>Gaétan de Rassenfosse</u> (EPFL), Gabriele Pellegrino (EPFL), Emilio Raiteri (Eindhoven University of Technology)</i> Discussant: Bernhard Gangelmair (ZEW, MaCCI & University of Mannheim)	The Effect of High-Skilled Migrant Hires and Integration Capacity on Firm-Level Innovation Performance: Is There a Premium? <i>Keld Laursen (Copenhagen Business School), <u>Bart Leten</u> (KU Leuven), Han Nguyen (Hasselt University), Mark Vancauterem (Hasselt University)</i> Discussant: Annette Becker (TU Munich)
Capabilities, Incentives, Institutions and National Innovation Performance: A Cross-Country Study <i>Xiaolan Fu (University of Oxford), <u>Jing Zhang</u> (University of Nottingham)</i> Discussant: Cindy Lopes-Bento (Maastricht University)	International Trade and Innovation Dynamics with Endogenous Markups <i>Laurent Cavenaile (University of Toronto), Pau Roldan-Blanco (Banco de Espana), <u>Tom Schmitz</u> (Bocconi University)</i> Discussant: Mark Roberts (Pennsylvania State University & NBER)	Many Are Called, Few Are Chosen: The Role of Science in Drug Development Decisions <i><u>Relinde Colen</u> (Hasselt University), René Belderbos (KU Leuven), Stijn Kelchtermans (KU Leuven), Bart Leten (KU Leuven)</i> Discussant: Florence Blandinieres (ZEW)	Teams, Interdisciplinarity and the Rising Complexity of Research <i>Nicolas Carayol (Université de Bordeaux), <u>François Maublanc</u> (Université de Bordeaux)</i> Discussant: Elisabeth Müller (German Graduate School of Management and Law)