

First Annual Empirical Conference on Standardization

Thursday, May 23, 2019 — Friday, May 24, 2019

Northwestern University—Wieboldt Hall

340 E. Superior Street, Chicago, IL 60611

Organized by Justus Baron

Thursday, May 23rd

8:30 a.m. **Registration Check-In**

8:30 to 9:20 **Breakfast**

9:20 to 10:40 **Session 1 — Standardization and Innovation**
(25-minute presentation/each followed by 5 minute discussant, then 10 minute open discussion)

“Learning When to Quit: An Empirical Model of Experimentation in Standards Development”

Bernhard Ganglmair, ZEW, MaCCI, and University of Mannheim

Discussant: **Jorge Lemus**, Department of Economics, University of Illinois at Urbana-Champaign

“The Effect of Standardization on Innovation: A Machine Learning Approach”

Petyo Bonev, University of St. Gallen

Discussant: **Dylan Boynton**, Kellogg School of Management, Northwestern University

10:40 to 11:00 a.m. **Break**

11:00 to 12.20 p.m. **Session 2 — Standards and Patents**
(25-minute presentation/each followed by 5 minute discussant, then 10 minute open discussion)

“The Causal Effects of Including Standards-related Documentation into Patent Prior Art: Evidence from an EPO Policy Change” (with Arianna Martinelli and Federico Tamagni)

Rudi Bekkers, Eindhoven University of Technology

Discussant: **Andrew Toole**, US Patents and Trademark Office (USPTO)

“Over-Declaration of Standard-Essential Patents and the Determinants of Essentiality”

Robin Stitzing, Compass Lexecon

Discussant: **Byeongwoo Kang**, Institute of Innovation Research, Hitotsubashi University

12:20 to 1:20 **Lunch**

1:20 to 3:20 **Session 3 — Standards, Innovation, and Intellectual Property Rights**
(25-minute presentation/each followed by 5 minute discussant, then 10 minute open discussion)

The Incentives of Patent-Ownership Fragmentation of Standard-Setting Organizations: Theory and Empirical Evidence”

Jin Wang, Kansas State University

Discussant: **Gaston Llanes**, Catholic University of Chile

“How Do Patent Assertion Entities Influence the Direction of Technological Change? Evidence from 3GPP SDO”

Aija Leiponen, Cornell University

Discussant: **Ram Ranganathan**, University of Texas at Austin

“Why Do R&D-Intensive Firms Participate in Standards Organizations? The Role of Patents and Product-Market Position”

Justus Baron, Northwestern Center on Law, Business, and Economics, Northwestern Pritzker School of Law

Discussant: **Amol Joshi**, College of Business, Oregon State University

3:20 to 3:40 **Break**

3:40 to 5:00

Session 4 — The Governance of Consensus Standardization

(30-minute presentation/each, followed by 10-minute open discussion)

“Making the Rules. The Governance of Standard Developing Organizations and their Policies on Intellectual Property Rights”
Pierre Larouche, Université de Montréal

“The Origins of the Industrial Standardization Movement and the World Outside Europe and North America”
Craig N. Murphy, Wellesley College

5:00 to 6:00

Reception

6:00

Dinner

Friday, May 24th

8:00 a.m.

Breakfast (WB 540)

8:45 to 10:45

Session 5 — Standards Adoption and Certification

(25-minute presentation/each followed by 5 minute discussant, then 10 minute open discussion)

“Trademarks, Certification Marks and Technical Standards”

“Standards Setting Organizations and Trademark Registration: An Empirical Analysis”

Jorge Contreras, University of Utah

Brad Biddle, Center for the Study of Law, Science and Technology, Arizona State University School of Law

Discussant: **David L. Schwartz**, Northwestern Pritzker School of Law

“Certifier Competition and Audit Grades”

Talia Bar, University of Connecticut

Discussant: **Imke Reimers**, Northeastern University

“Differentiation Strategies in the Adoption of Environmental Standards: LEED from 2000-2014”

Marc Rysman, Boston University

Discussant: **Pere Arque-Castells**, Northwestern Center on Law, Business, and Economics, Northwestern Pritzker School of Law

10:45 to 11:00 **Break**

11:00 to 12:30 p.m. **Session 6 — IEEE Policy Change: Taking Stock of the Empirical Evidence**

Moderator: **Anne Layne-Farrar**, CRA International

Tim Pohlmann, CEO and founder IPlytics GmbH, Associate Researcher Technical University of Berlin, Germany

Kirti Gupta, Vice President, Technology and Economic Strategy, Qualcomm Inc.

Phil Wennblom, Senior Director, Standards Policy, Intel Corporation and IEEE SA

12:30 **Adjourn**

Confirmed Conference Participants (as of 5/15/2019):

1. **Abdel Alshadafan**, Bavarian School of Public Policy, Technical University of Munich
2. **Pere Arque-Castells**, Northwestern Center on Law, Business, and Economics, Northwestern Pritzker School of Law
3. **Talia Bar**, Department of Economics, University of Connecticut
4. **Justus Baron**, Northwestern Center on Law, Business, and Economics, Northwestern Pritzker School of Law
5. **Rudi Bekkers**, Eindhoven University of Technology
6. **Brad Biddle**, Center for the Study of Law, Science and Technology, Arizona State University School of Law
7. **Petyo Bonev**, Swiss Institute for Empirical Economic Research, University of St. Gallen
8. **Dylan Boynton**, Kellogg School of Management, Northwestern University
9. **Emily S. Bremer**, Notre Dame Law School
10. **Carlo Capuano**, Department of Economics and Statistics (DISES), University of Naples Federico II - Complesso Universitario di Monte S. Angelo, Via Cinthia, Naples, Italy
11. **Julie Carlson**, U.S. Federal Trade Commission
12. **Avik Chakrabarti**, Department of Economics, University of Wisconsin, Milwaukee
13. **Jorge L. Contreras**, S.J. Quinney College of Law, University of Utah
14. **Mian Dai**, Department of Economics and International Business, Bennett S. LeBow College of Business, Drexel University

15. **Soumitra Das**, U.S. Federal Communications Commission
16. **Mary Donaldson**, National Institute of Standards and Technology
17. **John Dubiansky**, Director of IP and Standards Policy, Dolby Laboratories, Inc.
18. **Georgios Effraimidis**, Qualcomm Inc.
19. **Alexander Galetovic**, Universidad de las Andes
20. **Bernhard Ganglmair**, ZEW, MaCCI, and University of Mannheim
21. **Kirti Gupta**, Qualcomm Inc.
22. **Heather Hammermeister**, Qualcomm Inc.
23. **Olena Ivus**, Smith School of Business, Queen's University
24. **Amol Joshi**, College of Business, Oregon State University
25. **Byeongwoo Kang**, Institute of Innovation Research, Hitotsubashi University
26. **Olia Kanevskaia**, Tilburg Law School/TILEC
27. **Jungbae Kim**, Leonard N. Stern School of Business, New York University
28. **Pierre Larouche**, Faculty of Law, Université de Montréal
29. **Anne Layne Farrar**, Charles River Associates
30. **Aija Leiponen**, Charles H. Dyson School of Applied Economics and Management, Cornell University
31. **Marie Le Mouel**, TILEC, Economics Department, Tilburg University
32. **Jorge Lemus**, Department of Economics, University of Illinois at Urbana-Champaign
33. **Gaston Llanes**, School of Business of the Catholic University of Chile
34. **Arianna Martinelli**, Scuola Superiore Sant'Anna, Pisa, Italy
35. **Maggie Qiuzhu Mei**, Management of Technology and Strategy (MTS), Grenoble Ecole de Management
36. **Saeed Moshiri**, Department of Economics, STM College, University of Saskatchewan
37. **Craig N. Murphy**, Department of Political Science, Wellesley College
38. **Shukhrat Nasirov**, Leicester Castle Business School, De Montfort University
39. **Tim Pohlmann**, IPlytics and Technical University Berlin
40. **Ram Ranganathan**, McCombs School of Business, The University of Texas at Austin
41. **Imke Reimers**, Northeastern University
42. **Julius Rissanen**, Nokia Technologies
43. **Tatiana Rosa**, Centro de Estudios Monetarios y Financieros (CEMFI)
44. **Marc S. Rysman**, Department of Economics, Boston University
45. **Nilesh Saraf**, Beedie School of Business, Simon Fraser University
46. **Julia Schmidt**, Banque de France
47. **David L. Schwartz**, Northwestern Pritzker School of Law
48. **Ralph Siebert**, Purdue University, Department of Economics, Krannert School of Management
49. **Matthew L. Spitzer**, Northwestern Center on Law, Business, and Economics, Northwestern Pritzker School of Law
50. **Robin Stitzing**, Compass Lexecon
51. **Jeffrey Strauss**, Buffett Institute for Global Affairs, Northwestern University
52. **Hui Sun**, Kellogg School of Management, Northwestern University
53. **Federico Tamagni**, Scuola Superiore Sant'Anna, Pisa, Italy
54. **Andrew Toole**, Chief Economist, US Patents and Trademark Office (USPTO)
55. **Jin Wang**, Kansas State University
56. **Phil Wennblom**, Intel Corporation and IEEE SA
57. **Mingtao Xu**, Krannert School of Management, Purdue University
58. **Suli Zheng**, School of Economics and Management, China Jiliang University
59. **Lijun Zhou**, Visiting Scholar, Katz Graduate School of Business, University of Pittsburgh, College of Economics and Management, and China JiLiang University