

# The 50<sup>th</sup> Research Conference on Communications, Information and Internet Policy September 16-17, 2022

**Hybrid Conference**  
All times shown are Eastern Time

*Hosted by American University Washington College of Law  
Washington, DC*

## **Friday, September 16, 2022**

8:30 am	Registration and Coffee
9:00 am	Paper Sessions outlined in grid
10:40 am	Coffee Break and Networking sponsored by The Brattle Group
11:05 pm	Paper Sessions outlined in grid
12:45 pm	Lunch and Keynote "Walk Down Memory Lane: 50 Years of Policy Research"
2:15 pm	Panels as listed below
3:45 pm	Coffee Break and Networking sponsored by Stand Together Trust
4:10 pm	Paper Sessions outlined in grid
5:50 pm	Posters/Reception
6:30 pm	50th Anniversary Celebration Dinner and Panel, Reflections on the Impact of Telecommunications Policy Research Conferences
8:30 pm	Gala Dessert Reception

## **Saturday, September 17, 2022**

8:30 am	Registration and Coffee
9:00 am	Paper Sessions outlined in grid
10:40 am	Coffee Break and Networking sponsored by The Brattle Group
11:05 am	Paper Sessions outlined in grid
12:45 pm	Lunch/Student Paper Awards and Announcements
2:00 pm	Panels listed below
3:30 pm	Coffee Break and Networking sponsored by Satellite Industry Association
4:00 pm	Paper Sessions outlined in grid

**For complete details and descriptions, please see our website, [www.tprcweb.com](http://www.tprcweb.com).**

## Conference Information

The 50<sup>th</sup> Annual Telecommunications Policy Research Conference will be held in person at Washington College of Law, American University in Washington, DC. There will be a virtual component for those unable to travel. Each registrant will be sent a link to our scheduling tool, SCHED, which will provide information about each of the sessions. Sessions will be recorded and archived for future viewing. Please contact Laura Verinder, [laura.verinder@gmail.com](mailto:laura.verinder@gmail.com) with any questions.

## Conference Registration

Online registration is available at <https://www.tprcweb.com/>.

## Conference Fees

	Early Registration		After August 15	
	Virtual	In-Person	Virtual	In-Person
<b>Student</b>	<b>\$50.00</b>	<b>\$125.00</b>	<b>\$75.00</b>	<b>\$250.00</b>
<b>Author/Presenter/Discussant</b>	<b>\$200.00</b>	<b>\$250.00</b>	<b>\$300.00</b>	<b>\$400.00</b>
<b>Academic</b>	<b>\$250.00</b>	<b>\$455.00</b>	<b>\$350.00</b>	<b>\$600.00</b>
<b>Government</b>	<b>\$250.00</b>	<b>\$455.00</b>	<b>\$350.00</b>	<b>\$600.00</b>
<b>Not for Profit</b>	<b>\$250.00</b>	<b>\$455.00</b>	<b>\$350.00</b>	<b>\$600.00</b>
<b>Corporate</b>	<b>\$495.00</b>	<b>\$695.00</b>	<b>\$595.00</b>	<b>\$850.00</b>

Registration fees cover all conference sessions and access to recorded sessions.



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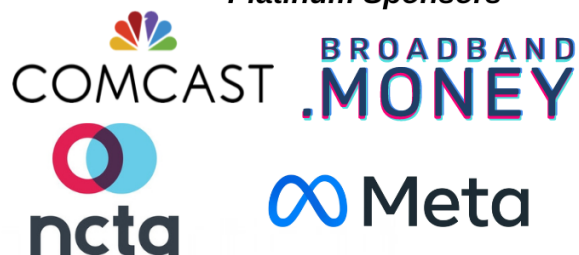
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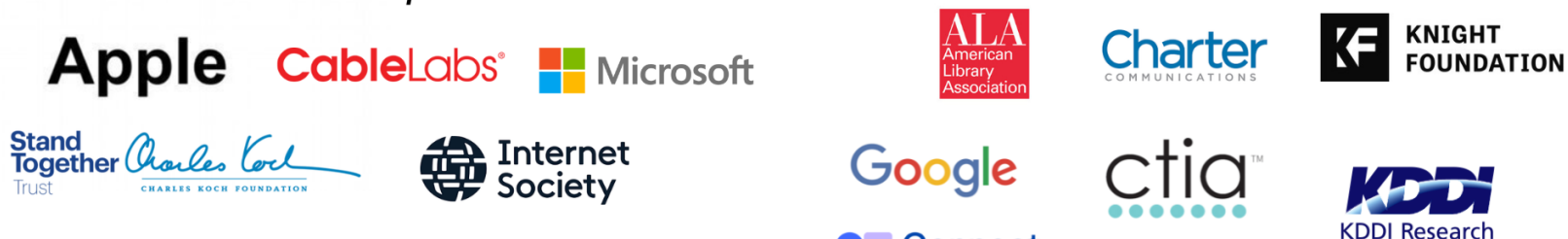
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For additional information on sponsorship opportunities, contact Syd Verinder at [syd.verinder@gmail.com](mailto:syd.verinder@gmail.com)

TPRC 2022 September 16-17, 2022

September 13, 2022- Program Subject to Change

Paper Sessions Friday, September 16

9:00 - 10:40	<b>Room NT07</b> <b>Spectrum Management and Policy</b> <b>Discussant:</b> <b>Sarah Oh Lam, TPI</b>	<b>Room Y402</b> <b>Internet Inequalities</b> <b>Discussant:</b> <b>James Prieger,</b> <b>Pepperdine University</b>	<b>Room Y403</b> <b>Broadband Impacts</b> <b>Discussant:</b> <b>John Horrigan, Benton Institute</b> <b>for Broadband &amp; Society</b>	<b>Room NT08</b> <b>Digital Economy</b> <b>Discussant:</b> <b>Aurelien Portuese, ITIF</b>	<b>Room NT01</b> <b>Social Dimensions of</b> <b>Communications and Internet</b> <b>Policy (disinformation)</b> <b>Discussant:</b> <b>Eli Noam, Columbia University</b>
	<b>Why Has Multilateral Space and Spectrum Resource Management Become More Difficult?</b> Rob Frieden, Penn State University	<b>A Digital Privacy Divide: How Privacy Concerns Reinforce Digital Inequalities Online</b> William Dutton, GCSCC Computer Science University of Oxford, Quello Professor; Grant Blank, Oxford Internet Institute; and Egle Karpauskaite, Independent	<b>Need for Speed: Broadband and Student Achievement</b> Cole Campbell, University of Illinois at Chicago.	<b>The Economics of Privacy: Examining the Intersection between the Issue of Maximizing Economic Profits and the Legal Repercussions of Surveilling Muslims through the Case of the Muslim Pro App</b> Ahmed Alrawi, Penn State. <b>VIRTUAL PRESENTATION</b>	<b>Free Speech, Platforms &amp; The Fake News Problem</b> Marshall Van Alstyne, Boston University / MIT.
	<b>Mitigating conflict situations in spectrum sharing: A localized and decentralized governance approach.</b> Pedro Bustamante, Carnegie Mellon University ***	<b>The Impact of Broadband on Poverty Reduction in Rural Ecuador</b> Hernan Galperin, University of Southern California; Raul Katz, Telecom Advisory Services/Columbia Business School; Ramiro Valincia, Telecom Advisory Services	<b>The Profitability of Flat-Price Broadband with An Over-The-Top Subscription Content Product – Benefits from Cooperation</b> Bronwyn Howell, Victoria University of Wellington; Petrus H. Potgieter, University of South Africa, Department of Decision Sciences	<b>The Role of Transaction Cost Engineering in Standards Adoption: Evidence from Internet Security</b> Christopher Yoo, University of Pennsylvania; and David Wishnick, Georgetown University Law Center.	<b>Hide and Seek the Truth? – Anonymity and Transparency in the Digital Age</b> Amit Schejter, Penn State University; Ben-Gurion University of the Negev and Moran Yemini, Center for Cyber, Law and Policy, University of Haifa; Information Society Project, Yale Law School; Digital Life Initiative, Cornell Tech
	<b>Spectrum Rights in Outer Space: Interference Management for Mega-constellations</b> Randall Berry, Northwestern University; Pedro Bustamante, Carnegie Mellon University; Dongning Guo, Northwestern University; Michael Honig, Northwestern University; Whitney Lohmeyer, Olin College of Engineering; Ilia Murtazashvili, University of Pittsburgh; Scott Palo, University of Colorado, Boulder and Martin Weiss, University of Pittsburgh, Tom Hazlett, Clemson University	<b>Internet Inequity in Chicago: Adoption, Affordability, and Availability</b> Tarun Mangla, University of Chicago; Udit Paul, University of California Santa Barbara; Arpit Gupta, University of California Santa Barbara; and Nicole Marwell, University of Chicago; and Nick Feamster, University of Chicago	<b>The Public Good and Public Attitudes Toward Data Sharing through Smart City Technologies</b> Karen Mossberger, Arizona State University; Seong K. Cho, Duke University; and Pauline Cheong, Arizona State University.	<b>Rethinking Peltzman's Economic Model of Regulation Through Ownership Consolidation and Digitized Media Communication Landscapes</b> Sydney Forde, The Pennsylvania State University.	<b>Behind Every Good Lie is a Grain of Truth: Deriving Identity-Based Demand for Disinformation in Moldova and Taiwan Using GIS Applications</b> Katherine Kurata, The Fletcher School of Law and Diplomacy at Tufts University ***

11:05 - 12:45	<p align="center"><b>Room NT07</b> <b>Spectrum Management and Policy</b> Discussant: Giulia McHenry, FCC</p>	<p align="center"><b>Room Y402</b> <b>Broadband Performance</b> Discussant: David Reed, University of Colorado Boulder</p>	<p align="center"><b>Room Y403</b> <b>Broadband Technology and Policy</b> Discussant: Christos Makridis, Stanford University</p>	<p align="center"><b>Room NT08</b> <b>Digital Economy</b> Discussant: Silvia Elaluf-Calderwood, Florida International University</p>	<p align="center"><b>Room NT01</b> <b>Social Dimensions to Communications and Internet Policy</b> Discussant William Rinehart, Center for Growth and Opportunity</p>
	<p><b>Auctions and Mobile Market Competition: Evidence from European 4G Auctions</b> David Salant, Toulouse School of Economics.</p>	<p><b>Broadband Labels: Performance and Network Management</b> Scott Jordan, University of California, Irvine.</p>	<p><b>Research on Community Networks: What's Old is New Again</b> Heather Hudson, University of Alaska and Rob MacMahan</p>	<p><b>Interoperability in Digital Markets</b> Jan Kraemer, University of Passau; Center on Regulation in Europe (CERRE) and Marc Bourreau, Telecom ParisTech.</p>	<p><b>À la Carte Cable: A Regulatory Solution to the Disinformation Subsidy</b> Christopher Terry, Hubbard School of Journalism and Mass Communication; Eliezer Silberberg, University of Minnesota Law School; Stephen Schmitz, University of Minnesota Law School; John Stack, University of Minnesota- Twin Cities, School of Law; Evan Sando, University of Minnesota Law School</p>
	<p><b>Understanding Spectrum Prices in Recent Upper Mid-Band FCC Auctions</b> Ryan Taylor, The Brattle Group; Austin Lajoie, The Brattle Group; and Coleman Bazelon, The Brattle Group.</p>	<p><b>Understanding the metrics of Internet broadband access: How much is enough?</b> David Clark, MIT; and Sara Wedeman, MIT CSAIL.</p>	<p><b>Broadband Voucher Programs: Evaluating the Alabama Broadband Connectivity Program</b> Erezi Ogbo, North Carolina Central University</p>	<p><b>Vertical Control Change and Platform Organization under Network Externalities</b> Shiva Shekhar, Tilburg University - Tilburg University; Compass Lexecon, University of Passau; Jorge Padilla, Compass lexecon; and Salvatore Piccolo, Compass Lexecon.</p>	<p><b>Preserving Human Rights Across the Digital Domain</b> Richard Taylor, Penn State University.</p>
	<p><b>Auction 107 (C-Band): Policy Overview and Closing Bid Price Analysis of Expedited Access due to \$9.7B in Accelerated Relocation Payments to Incumbent Satellite Operators</b> Pranavi Boyalakuntla, Olin College of Engineering; Gati Aher, Olin College of Engineering; Grant Miner, Olin College of Engineering; Lieselotte Heinrich, Olin College of Engineering; Yuxiang Mao, Olin College of Engineering; Phillip Post, Olin College of Engineering; Armand Musey, Summit Ridge Group and Whitney Lohmeyer, Olin College of Engineering.</p>	<p><b>Rural consumer internet perspectives: A hard look at quality and policy</b> Angela Hollman, University of Nebraska at Kearney; Tim Obermier, University of Nebraska at Kearney; and Jesse Andrews, University of Nebraska at Kearney.</p>	<p><b>Smart Contracts: Myths and Implications for Economics and Financial Regulation</b> William Lehr, Massachusetts Institute of Technology.</p>	<p><b>A Critique of the "Surveillance Capitalism" Thesis: Toward a digital political economy</b> Milton Mueller, Georgia Institute of Technology School of Public Policy</p>	<p><b>Reckless Associations</b> Jane Bambauer, University of Arizona; Saura Masconale, University of Arizona; and Simone Sepe, University of Arizona, Université Toulouse 1 Capitole; Toulouse School of Economics; European Corporate Governance Institute (ECGI); American College of Governance Counsel. <b>VIRTUAL PRESENTATION</b></p>

4:05-5:40	<p><b>Room NT07</b>  <b>TPRC 50th Anniversary Retrospectives</b>  Discussant:  Carolyn Gideon, Tufts University</p>	<p><b>Room NT08</b>  <b>COVID Impacts on Communications</b>  Discussant:  Rafi Goldberg, NTIA</p>	<p><b>Room Y403</b>  <b>Broadband Competition</b>  Discussant:  Jay Schwarz, Comcast</p>	<p><b>Room Y402</b>  <b>Privacy Infrastructures</b>  Discussant:  Madelyn Sanfillipo, University of Illinois - CU</p>	
	<p><b>Becoming an Internet Policy Conference: A Retrospective</b>  Marjory Blumenthal, MSBlumenthal, LLC</p>	<p><b>Onlining in the Time of Covid: Broadband Infrastructure and U.S. School District Policy During the Pandemic</b>  Kenneth Flamm, LBJ School of Public Affairs, University of Texas at Austin.  <b>VIRTUAL PRESENTATION</b></p>	<p><b>The Dynamic Effects of Competition on Investment: the Case of the European Mobile Communications Industry</b>  Pau Castells, GSMA and Kalvin Bahia, GSMA</p>	<p><b>Opening Schrödinger's Box: An Independent Assessment of Applications and Regulatory Implications of Quantum Technology</b>  Joran van Apeldoorn, University of Amsterdam; Joris van Hoboken, University of Amsterdam and Geoff Gordon, The Asser Institute.  <b>VIRTUAL PRESENTATION</b></p>	
	<p><b>History of TPRC Conference Research and Structure: 1972 - 2022</b>  Janice Hauge, University of North Texas.</p>	<p><b>Behind the pandemic: using Covid to understand the digital divide within Spain</b>  Covadonga Gijón, UNED - Universidad Nacional de Educación a Distancia and Jason Whalley, University of Northumbria at Newcastle.</p>	<p><b>Benchmarks or Equity? A New Approach to Measuring Internet Performance</b>  Ranya Sharma, University of Chicago; Tarun Mangla, University of Chicago; James Saxon, University of Chicago; Marc Richardson, University of Chicago; Nick Feamster, University of Chicago and Nicole Marwell, University of Chicago.  <b>VIRTUAL PRESENTATION</b></p>	<p><b>The standardization of lawful interception technologies in the 3GPP</b>  Christoph Becker, University of Amsterdam; Niels ten Oever, University of Amsterdam; and Riccardo Nanni, University of Bologna.  <b>VIRTUAL PRESENTATION</b></p>	
	<p><b>Learning from the neighbors: The diffusion of state broadband policies in United States (1991-2021)</b>  Ryan Wang, Donald P. Bellisario College of Communications, Penn State University and Krishna Jayakar, Donald P. Bellisario College of Communications, Penn State University.</p>	<p><b>Digital Inequality and COVID-19 Knowledge</b>  Eszter Hargittai, University of Zurich</p>	<p><b>What's In a Label?</b>  Paroma Sanyal, The Brattle Group; Coleman Bazelon, The Brattle Group and Divya Goel, The Brattle Group.</p>	<p><b>Building an Authentication Infrastructure— Designing a Two Factor Authentication Hardware Token with Form Factor that Encourages Engagement</b>  Zitao Zhang, Indiana University Bloomington, Jacob Abbott, Indiana University Bloomington, Sanchari Das, University of Denver and L. Jean Camp, Indiana University Bloomington.  <b>VIRTUAL PRESENTATION</b></p>	

Paper Sessions Saturday September 17, 2022

9:00 - 10:40	<p align="center"><b>Room NT07</b>  <b>Spectrum Management and Policy</b>                      Discussant:                      Roslyn Layton,                      Strand Consult</p>	<p align="center"><b>Room NT01</b>  <b>Privacy and the State</b>                      Discussant:                      Dhanaraj Thakur, Center for                      Democracy and Technology</p>	<p align="center"><b>Room Y403</b>  <b>Broadband Technology and Policy</b>                      Discussant:                      Petrus Potgieter,                      University of South Africa</p>	<p align="center"><b>Room NT08</b>  <b>Digital Sovereignty and Governance</b>                      Discussant:                      Erik Bohlin                      Chalmers</p>	<p align="center"><b>Room Y402</b>  <b>Broadband Technologies and Policy</b>                      Discussant:                      Scott Wallsten,                      Technology Policy Institute</p>
	<p><b>Spectrum Sovereignty on Tribal Lands: Assessing the DIGITAL Reservations Act</b>                      Darrah Blackwater, Independent; Ilia Murtazashvili, University of Pittsburgh; and Martin Weiss, University of Pittsburgh.</p>	<p><b>The Patchwork of State Data Privacy Laws and Competition and Opportunity in Digital Markets</b>                      Jennifer Huddleston, NetChoice.</p>	<p><b>Economic Impact of Asymmetric Paid Peering: Implications from the Netflix vs. SK Broadband Dispute</b>                      Toshiya Jitsuzumi, Chuo University</p>	<p><b>Entity of the State: The Transparency of Restricting Telecommunications Firms as Threats to America's National Security</b>                      Benjamin W. Cramer, Bellisario College of Communications, The Pennsylvania State University</p>	<p><b>The spatiality of connectivity: a spatial analysis of public Wi-Fi locations in New York City</b>                      Ryan Wang, Donald P. Bellisario College of Communications, Penn State University</p>
	<p><b>Using Spectrum Allocations to Address Indigenous Policy Obligations: the case of New Zealand</b>                      Bronwyn Howell, Victoria University of Wellington; and Xin Tang, Victoria University of Wellington.</p>	<p><b>Beyond digital protectionism?: Comparing personal data regulation frameworks in China, India, and South Korea</b>                      Rohan Grover, University of Southern California Annenberg School for Communication and Journalism, Kyooeun Jang, University of Southern California Annenberg School for Communication and Journalism and Li Wen Su, University of Southern California / London School of Economics  <a href="#">VIRTUAL PRESENTATION</a></p>	<p><b>Best Practices for Collecting Speed Test Data</b>                      Kyle MacMillan, University of Chicago; Tarun Mangla, University of Chicago; Marc Richardson, University of Chicago; and Nick Feamster, University of Chicago.  <a href="#">VIRTUAL PRESENTATION</a></p>	<p><b>Digital Sovereignty and Resilience</b>                      David Tipper, University of Pittsburgh and Prashant Krishnamurthy, University of Pittsburgh .  <a href="#">VIRTUAL PRESENTATION</a></p>	<p><b>Delivering Affordable Universal Broadband: Exploring the Global Investment Needs of Broadband Infrastructure to Achieve Target 9c of the Sustainable Development Goals</b>                      Edward Oughton, George Mason University, University of Oxford</p>
	<p><b>Use It or What?</b>                      Gregory Taylor, University of Calgary.</p>	<p><b>Enforcement Discretion in Tech Policy: A fuzzy-set qualitative comparative analysis (fsQCA) across data protection authorities post GDPR</b>                      Ido Sivan-Sevilla, University of Maryland.</p>	<p><b>Are the Settlement-Free Peering Policy Requirements for ISPs and CDNs Based on Network Costs?</b>                      Ali Nikkhah, University of California, Irvine and Scott Jordan, University of California, Irvine</p>		<p><b>Internets: The changing role of Internet Protocols in evolving broadband technologies</b>                      Dana Cramer, Ryerson University.</p>



11:05 - 12:45	<b>Room NT07</b> <b>Spectrum Management and Policy</b> Discussant: <b>John Chapin, NSF</b>	<b>Room NT01</b> <b>Privacy</b> Discussant: <b>L Jean Camp, Indiana University</b>	<b>Room Y403</b> <b>Broadband Competition</b> Discussant: <b>Roxana Barrantes, PUCP</b>	<b>Room Y402</b> <b>Broadband Performance</b> Discussant: <b>Bob Cannon, NTIA</b>	<b>Room NT08</b> <b>Privacy and Identity</b> Discussant: <b>Marcela Gomez, University of Pittsburgh</b>
	<b>Dispelling Revisionist Myths Regarding Spectrum Property Rights in the 1920s</b> Charles Jackson, JTC.	<b>My Browser is not a Billboard: Experimental Evidence on Ad-blocking Adoption and Users' Acquisition of Information</b> Niklas Fourberg, Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste (WIK); Serpil Tas, Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste (WIK); and Lukas Wiewiorra, Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste (WIK). <b>VIRTUAL PRESENTATION</b>	<b>Digital Disregard: A Case for Amending Quebec's Children Advertising Legislation</b> Erika Solis, Penn State University; Sydney Forte, Penn State University; and Yasemin Beykont, Penn State University	<b>A Game of Quality Competition Among ISPs</b> Andrew Kearns, Northeastern University.**	<b>Privacy Risks in the Internet of Things: The Impact of Ambiguity Aversion on Transparency Choices</b> Nikolai Sachs, University of Passau and Daniel Schnurr, University of Passau. <b>VIRTUAL PRESENTATION</b>
	<b>Regulation of Radio Frequency Communications: The Untold History of "Harmful Interference"</b> Peter Tenhula, University of Colorado, Silicon Flatirons Center; Carl Frank, NTIA <b>VIRTUAL PRESENTATION</b>	<b>Positive or zero-sum game: When privacy by design meets dark patterns</b> Kamesh Shekar, Independent; Karthik Venkatesh, Villanova Charles Widger School of Law, and Kazim Rizvi, The Dialogue.	<b>Impact of Municipal and Cooperative Internet Provision on Broadband Entry and Competition</b> Tianjiu Zuo, Duke University and Michelle Connolly, Duke University.	<b>Your Mileage May Vary or Performance You Can Count On: What Should Broadband Consumer Labels Measure?</b> Henning Schulzrinne, Columbia University; Walter Johnston, Independent and Andreas Carlos Freund, Columbia University	<b>Personal data on sale</b> Fernando Beltran, University of Auckland Business School.
	<b>Polycentric Governance in the US Amateur-Radio Community: Unassigned Spectrum and Promoting Open Innovation</b> Pedro Bustamante, University of Pittsburgh; Marcela Gomez, University of Pittsburgh; William Lehr, Massachusetts Institute of Technology; Iliia Murtazashvili, University of Pittsburgh; Ali Palida, University of Pittsburgh and Martin Weiss, University of Pittsburgh.	<b>Obstacles to Text- and Datamining Research: Copyright and More</b> Patricia Aufderheide, American University and Brandon Butler, University of Virginia.	<b>Universal broadband assessment of Low Earth Orbit satellite constellations: Evaluating capacity, coverage, cost, and environmental emissions</b> Bonface Osoro, George Mason University; and Edward Oughton, George Mason University.	<b>Crowdsourced QoS Evaluation in Broadband: Data Analytics Challenges and New Approaches</b> Cise Midoglu, Simula Metropolitan Center for Digital Engineering (SimulaMet).	<b>When to Collect Sensitive Category Data? Working Towards a Participatory Framework for Balancing Privacy and Freedom from Discrimination in Automated Decision Systems in the Public Sector</b> Anna Lenhart, University of Maryland.

4:00-5:40	<p><b>Room NT07</b>  <b>Spectrum Management and Policy</b>  Discussant:  Jon Peha,  Carnegie Mellon University</p>	<p><b>Room NT08</b>  <b>Digital Economy</b>  Discussant:  Richard Taylor  Penn State University</p>	<p><b>Room Y403</b>  <b>Broadband Infrastructure Trends</b>  Discussant  <b>Jonathan Liebenau,</b>  London School of Economics</p>	<p><b>Room Y402</b>  <b>Broadband Competition</b>  Discussant:  Edward Oughton,  George Mason University</p>	<p><b>Room NT01</b>  <b>Social Dimensions to Communications and Internet Policy</b>  Discussant:  Yong Jin Park,  Howard University</p>
	<p><b>Fast Interference Management</b>  John Chapin, National Science Foundation.</p>	<p><b>Assessing factors influencing the adoption of Technology in the Port Supply Chain Industry in West Africa Sub-region: A case study of Integrated Customs System in Ghana</b>  Ahmed Antwi-Boampong, Ghana Communications Technology University; David King Boison, Ghana Communications Technology University and Josephine Agbedoawu, University of the Witwatersrand.</p>	<p><b>How to build new infrastructure--lessons from the past</b>  David Gabel, Queens College.</p>	<p><b>The Anticompetitive Impacts of Exclusive Rights-of-Way and Unequal Subsidies in the Wireline Broadband Market</b>  Yongjoon Paek, The Brattle Group; Coleman Bazelon, The Brattle Group; Paroma Sanyal, The Brattle Group and Rui Yu, Independent.</p>	<p><b>Friction-In-Design Regulation as 21st Century Time, Place and Manner Restriction</b>  Brett Frischmann, Villanova University and Susan Benesch, Dangerous Speech Project, Harvard University - Berkman Klein Center for Internet &amp; Society  <b>VIRTUAL PRESENTATION</b></p>
	<p><b>Good Enough?</b>  Coleman Bazelon, The Brattle Group.</p>	<p><b>Do mobile applications give competitive advantage to Small and Medium Enterprises? Lessons from Indonesia</b>  Karto Adiwijaya, University of Indonesia; Ibrahim Rohman, University of Indonesia; and Moinul Zaber, United Nations University.  <b>VIRTUAL PRESENTATION</b></p>	<p><b>Purposeful Mobile Internet Adoption and Use in United States: A Geodemographic and Socioeconomic Analysis</b>  Avijit Sarkar, University of Redlands; and James Pick, University of Redlands.</p>	<p><b>Swords and Shields: Impact of Private Standards in Technology-Based Liability</b>  Gary Marchant, ASU - College of Law.</p>	<p><b>Close Encounters: Gauging Residents' Comfort and Trust Levels with Smart Technologies during Datawalks</b>  Gwen Shaffer, California State University Long Beach.</p>
	<p><b>How I Learned to Stop Worrying and Love the Windfall</b>  Joe Kane, Information Technology and Innovation Foundation.</p>	<p><b>Wearables from head to toe: Are they friend or foe? - An empirical landscaping of health and fitness wearables and apps in six countries to identify emerging policy challenges</b>  Anna Schneider, Fresenius University of Applied Sciences; and Rene Arnold, Huawei.</p>	<p><b>The solution is in the details: Building cybersecurity capacity in Europe</b>  Patricia Esteve-Gonzalez, University of Oxford; Sadie Creese, University of Oxford; William Dutton, University of Oxford; Michael Goldsmith, University of Oxford; Eva Nagyfejeo, University of Oxford; Jamie Saunders, University of Oxford; Basie von Solms, University of Johannesburg; and Carolin Weisser Harris, University of Oxford.  <b>VIRTUAL PRESENTATION</b></p>	<p><b>Safeguarding Competition in Digital Markets: A Comparative Analysis of Emerging Policy and Regulatory Regimes</b>  Tiago Sousa Prado, Quello Center at Michigan State University</p>	<p><b>Assessing the Depth and Importance of the Privacy Policies of Children's MMO Games</b>  Erika Solis, Penn State University</p>

## Panel Sessions

### Friday Gala Dinner Panel

#### Reflections on the impact of Telecommunications Policy Research Conferences

In the 50 years since the first TPRC, the industry has undergone a sea change; the landscape has altered dramatically with new players, new technologies and transformed regulatory practices. Initially the concerns were telephony and media issues, primarily cable television services. Now the internet dominates with concerns about e-commerce, privacy, social media, infrastructure and all the underlying problems of competition, investment, trade and market shaping. Earlier issues have faded. The early conferences had significant influence on policy with transformative issues such as privatization addressed in the very first conference. In subsequent years, not just the telephone companies but other state owned enterprises were privatized. In the early years, only a few academics discussed the sale of electromagnetic spectrum or competition as a substitute for regulation – ideas that are now commonplace. Few could have imagined the breaking up of AT&T in 1972. The TPRC at first focused on a narrow scope of economic issues but later included legal dimensions. In the following years the meetings were much broader as the interrelated relevance of many topics became clear such as comparative international experiences, social and cultural impacts, ethics, systems architecture, financial models, technical functionalities, security and even geopolitical rivalries. While policy papers had been written by others long before 1972, TPRC was and is a conference which attempts to connect policymakers with academic research – and researchers with issues confronting policymakers. These conferences have pushed federal and state agencies to hire more economists and for policymakers to listen to their arguments. It has encouraged graduate students to become involved in communications studies. This panel will reflect on the impact and history over the last fifty years of TPRC and address the future of research in these areas.

Two panel members were involved with the first TPRC conference and have been active in communications policy in government and industry as well as within the academy over the past 50 years. They will opine on the impact of research on policy and that of policy on research. The history of the nexus between policy and research is examined by another panel member. Another panel member will discuss the application of the policies, in particular privatization: what worked, what did not and what was omitted. The last member will examine current and future issues based on experiences reviewing and awarding research grants.

Panel:

- Introduction/Overview: Research's impact on policy: James Alleman, University of Colorado – Boulder. Chair
- Policy's impact on research: Gerry Faulhaber, Wharton School of the University of Pennsylvania.
- The nexus of research and policy: a historical perspective: Jonathan Liebenau, London School of Economics
- Guns, Graft and Sex: How the Sometime Messy Road To Telecoms Privatizations Led to Macroeconomic Success: Judith O'Neill, CEO, Nakhota, LLC
- Research Funding: next generation internet: Loretta Anania\* European Commission

### Friday, September 16, 2:15 pm

#### The future of reverse auctions

#### Room NT07

In 2010, the National Broadband Plan called for the FCC to use competitive bidding to award universal service fund (USF) support to bring broadband to high cost areas. Over the next decade, the FCC conducted four reverse auctions that awarded close to \$11 billion: the Mobility Fund Phase I auction (Auction 901), the Tribal Mobility Fund Phase I auction (Auction 902), the Connect America Fund Phase I auction (Auction 903), and the Rural Digital Opportunity Fund auction (Auction 904). The FCC's reverse auction program evolved as each auction built upon lessons learned from prior auctions while incorporating emerging policy considerations. Not surprisingly, each auction has supporters and detractors, most recently Auction 904, which was conducted in 2020. And each auction has been

the focus of research examining the efficiencies that were realized and how the Commission's design choices affected auction outcomes. Looking forward, \$42.5 billion in broadband funding will be distributed through NTIA's Broadband, Equity, Access, and Development (BEAD) program, which requires states and territories to use a competitive selection process. Some have called for this unprecedented amount of funding to be allocated using reverse auctions to maximize the impact of these funds. This panel brings together researchers that have examined FCC reverse auctions, former FCC staff that implemented and designed these auctions, and commentators on broadband deployment programs to discuss and debate the future of using reverse auctions to award broadband funding.

Moderator: Michael Janson, FCC

Panelists:

Paroma Sanyal, The Brattle Group

Sarah Oh Lam, Technology Policy Institute

Cullin Robbins, Nebraska Public Service Commission

Alex Minard, NCTA

### **Financing mechanisms for community-owned internet infrastructure**

#### **Room NT08**

The panel will discuss the ecosystem of financial sustainability strategies that community networks have employed in recent years to bridge the digital divide in their communities.

The panel will cover the spectrum of financing mechanisms – from fully commercial sources of capital to blended finance and targeted government subsidies to community grants – with case studies that highlight approaches from both rural communities in the global North and developing countries in the global South.

Moderator: Ben Matranga, Connectivity Capital

Panelists:

**Jane Coffin**, *Connect Humanity*

**Adriana Labardini**, *Association for Progressive Communications (APC)*

**Anoop Magendra**, *Connectivity Capital*

**Juan Peirano**, *Internet Society*

### **Public Policy for the Metaverse: Competition, Innovation, and Protections**

#### **Room NT01**

The metaverse has been emerging for 20 years but accelerated in late 2021 when Facebook changed its name to Meta. In the metaverse, seemingly anything is possible. You can work, engage in immersive games, repair equipment, hold meetings, or visit museums with friends scattered across the globe. The metaverse is emerging from the convergence of online industries, including gaming, social media, fintech, cryptocurrency, and business computing. There are wide ranging opinions as to the advantages and challenges that each type of legacy industry faces in the metaverse. But this space is rapidly evolving, and it has outpaced controls and social norms that regulate behavior. As such, in some areas of the metaverse there is a growing dark side: the presence of unacceptable behaviors, including harassment, financial fraud, unchecked gambling, and data exploitation. This panel will help TPRC participants understand how the metaverse is evolving, the competitive and regulatory forces shaping it, and the dark side. Questions for the panel include: How is the metaverse evolving? What are the market

forces? What types of companies will succeed, and which might fade into history? Who should determine the rules for metaverse platforms? What should service providers be allowed to know about their users and how can they use that information? What are the risks for children and other vulnerable groups, and what protections should be in place for them?

Moderator: Mark Jamison, American Enterprise Institute and University of Florida

Panelists:

Marjory Blumenthal, MSBlumenthal LLC

Juan Londoño, Policy Analyst, Information Technology and Innovation Foundation

Christos Makridis, Stanford University and Columbia Business School's Chazen Institute

Lori Moylan, External Affairs and Public Policy, Meta

## **Saturday, September 17, 2 pm**

### **Lessons from Past and Current Policy Experiments for Future U.S. Broadband Policy**

#### **Room NT01**

This panel will critically examine broadband policy in the U.S. by interrogating lessons from past and current infrastructure programs and comparing them to emerging federal subsidy programs. It explores whether broadband policy has evolved sufficiently to address or redress unresolved problems from the last decade. A starting conjecture is whether sustainable forward-looking policy will require aligning supply-side and demand-side programs as well as complementary measures across local, state, and federal levels. The discussion will broadly examine the constraints and opportunities embedded in policies of the last decade to help answer a fundamental question: what actions can researchers and nonprofits undertake now to help individuals and communities avoid the insanity cycle that is embedded in U.S. broadband policy?

Moderator: Alexis Schrubbe, Merit Network

Panelists:

Angela Siefer, National Digital Inclusion Alliance

Anna Read, The Pew Charitable Trusts

François Bar, University of Southern California

Johannes M. Bauer, Michigan State University

Joshua D. Edmonds, City of Detroit Office of Digital Inclusion

Sharon Strover, University of Texas at Austin

### **The Global Impact of TPRC: A retrospective view from offshoot conferences in Asia/Africa (CPRSOUTH), Latin America (CPR Latam) and Europe (EuroCPR).**

#### **Room NT07**

Policy expertise and capacity building opportunities for ICT scholars and policymakers are often lacking in the Global South. Further, there are few opportunities for cross dialogue and knowledge sharing between industry, academia and government. Inspired by the success of TPRC (and later EuroCPR), two conferences were launched in the mid 2000s to address this gap: CPRSouth, which focused on South Asia and Africa, and CPR Latam, which focused on Latin America. Both shared the objective of creating a space for policy dialogue and knowledge sharing between ICT scholars and policymakers. This panel explores the contribution of TPRC-inspired conferences in different continents, with a strong focus on impacts in policy formation and capacity building in the ICT sector. Panelists will trace the different trajectories of these conferences, and reflect on their impacts on local policy capacity and their contributions to the broader academic field.

Moderator: Robin Mansell, Professor, London School of Economics (LSE, UK/Canada).

Panelists:

Alison Gillwald, Executive Director, Research ICT Africa and Adjunct Professor, University of Cape Town (CPRSouth co-founder, South Africa).

Hernan Galperin, Associate Professor, University of Southern California (CPR Latam co-founder, Argentina/US)

Judith Mariscal, Executive Director, Centro Latam Digital, CIDE (CPR Latam co-founder, Mexico).

Rohan Samarajiva, Chair, LIRNEasia (CPRsouth founder, Sri Lanka).

Roxana Barrantes, Professor, Pontificia Universidad Católica del Perú PUCP (CPR Latam co-founder, Peru).

## **Poster Session**

### **Plus ça change, plus c'est la même chose: Why Universal Access and Digital Divide Policy Issues have persisted over the last 50 years**

Prabir Neogi, *Carleton University*; Arthur Cordell, *Carleton University*; and Don Maclean, *Independent*

### **Looking Back, Looking Forward: The Evolution and Societal Impact of the Internet and Social Media, from TPRC25 to TPRC50 and Beyond**

Prabir Neogi, *Carleton University*; Arthur Cordell, *Carleton University*; and Don Maclean, *Independent*

### **Mapping skill-based technology stacks to regional innovation clusters: Uncovering the patterns from the ICT industry and the digital economy landscape**

Jisoo Lee, *Seoul National University*; Jaehyun Lee, *Seoul National University*; Jungho Kim, *Seoul National University*; and Junseok Hwang, *Seoul National University*

### **Employee Technology Skill Gaps in the Great Resignation**

Chris McGovern, *Connected Nation, Inc.*; and Eric Frederick, *Connected Nation, Inc.*

**Surfacing Hidden Insights, Reflections, and Priorities in Social Media Analysis on US Blockchain Executive Order**

Andre Kenneth Chase Randall, *University of Massachusetts Amherst*; and Kabir Israni, *University of Massachusetts Amherst*

**E-commerce readiness and economic development in the context of COVID-19 pandemic: The moderating effects of social trust**

Jisoo Hur, *Seoul National University*

**A General Model of (Internet) Governance**

Hans Klein, *Georgia Tech*