The 52nd Research Conference on Communications, Information and Internet Policy
September 19-21, 2024

In Person and Virtual Conference
All times shown are Eastern Time

Hosted by American University Washington College of Law

Thursday, September 19, 2024

9:00 am	Graduate Student Workshop (by invitation)
2:00 pm	Pre-conference Tutorial "Policy for Emerging Threats in Emerging Technologies"

Friday, September 20, 2024

8:30 am	Registration and Coffee
9:00 am	Paper Sessions outlined in grid
10:35 am	Coffee Break and Networking
11:00 pm	Paper Sessions outlined in grid below
12:45 pm	Lunch and Speaker
	Ellen Goodman, Rutgers University
2:05 pm	Panels as listed below
3:35 pm	Coffee Break and Networking sponsored
4:00 pm	Paper Sessions outlined in grid below
5:45 pm	Posters/Reception
5:45 pm	Meet the Author Tables
6:30 pm	Dinner and Keynote Speaker
	Johannes Bauer, Chief Economist, FCC

Saturday, September 21, 2024

8:30 am	Registration and Coffee
9:00 am	Paper Sessions outlined in grid
10:35 am	Coffee Break and Networking
11:00 am	Paper Sessions outlined in grid
12:45 pm	Lunch and Awards
2:00 pm	Panels listed below
3:30 pm	Coffee Break and Networking
4:00 pm	Paper Sessions outlined in grid

For complete details and descriptions, please see our website, www.tprcweb.com.

Conference Information

The 52nd 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 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**
Student	$50.00	$150.00	$75.00	$250.00
Author/Presenter/Discussant	$200.00	$275.00	$300.00	$425.00
Academic	$265.00	$475.00	$365.00	$625.00
Government	$265.00	$475.00	$365.00	$625.00
Not for Profit	$265.00	$475.00	$365.00	$625.00
Corporate	$500.00	$725.00	$600.00	$875.00

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

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For additional information on sponsorship opportunities, contact Syd Verinder at syd.verinder@gmail.com

Sessions Friday, September 20

9:00 - 10:35	Broadband Data and Analysis	Satellite & Space Economy	Digital Security and Privacy	Antitrust & Competition	Spectrum
	Room YT17	Room Y403	Room Y402	Room NT08	Room NT01
	Discussant: Janice Hauge University of North Texas	Discussant: Erik Bohlin Ivey Business School	Discussant: Silvia Elaluf-Calderwood Florida International University	Discussant: Paroma Sanyal The Brattle Group	Discussant: Mark Walker CableLabs
9:01 – 9:31	**The Hitchhiker's Guide to Analyzing the FCC Broadband Data Collection** Presenter: Jonatas Marques, University of Chicago Additional authors: Alexis Schrubbe, University of Chicago, Nicole Marwell, University of Chicago and Nick Feamster, University of Chicago	**Auctions in Space? Launching Markets in Satellite Spectrum** Presenter: Sarah Oh Lam, Technology Policy Institute	**Cross-Border Data Flow: A Trilemma of Mobility, Monetization, and Privacy** Presenter: Moinul Zaber, United Nations University VIRTUAL	**Competitive Effects of T-Mobile/Sprint: Analysis of a "4-to-3" Merger** Presenter: Thomas Hazlett, Clemson University Additional author: Robert Crandall, TPI	**First Party Spectrum Rights: The Potential to Expand Indoor-Only Open Access** Presenter: Michael Calabrese, Open Technology Institute at New America Additional author: Jessica Dine, Open Technology Institute at New America
9:33 – 10:03	**Filling in the Blanks: How Incorporating Rural Community Behavior Data into the National Broadband Map Supports Effective Policy Decisions** Presenter: Erika Heeren-Moon, Virginia Tech Additional author: Eric Burger, Virginia Tech	**Ground Station Filings to the Federal Communications Commission (FCC): the Unsung Link to Space** Presenter: Phillip Post, Olin College of Engineering Additional authors: Zayn Patel, Olin College of Engineering, Alex Mineeva	**National threats and responses toward digital social media: The case of global TikTok Regulations** Presenter: Le Yang, Tsinghua University	**Exploring Market Dynamics: Canada's Flanker Brands and American MVNOs** Presenter: Kevin Hudes, Toronto Metropolitan University **WITHDRAWN**	**Institutional Diversity in Spectrum Sharing: Exclusive and Nonexclusive Property-Rights Regimes** Presenter: Martin Weiss, University of Pittsburgh Additional authors: Ali Palida, University of Pittsburgh, Ilia Murtazashvili, University of Pittsburgh
10:05 – 10:35	**Broadband Network Usage Fees: Empirical and Theoretical Analysis Versus Observed Broadband Investment and Content Development. Insight from Korea and the Rest of the World**. Presenter: Roslyn Layton, Aalborg University Additional authors: Toshiya Jitsuzumi, Chuo University; and Dae Keun Cho, Sogang University	**Assessing Commercialization Strategies for Evolving Network Demand (ASCEND) in the NASA Space Communications and Navigation (SCaN) program** Presenter: Jeffrey Dobereiner, Teltrium Inc Additional authors: Edward Oughton, George Mason University, Erica Weir, Teltrium Inc., Phoebe Wetherbee, Teltrium Inc., and Gregory Heckler, NASA Space Communications and Navigation (SCaN) program		**Interoperability for number-independent interpersonal communications services under the DMA: More harm than good?** Presenter: Serpil Taş, WIK (Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste) Additional authors: Lukas Wiewiorra, WIK, and Andrea Liebe, WIK VIRTUAL	**The Theoretical and Empirical Relationship Between Spectrum Concentration and Downstream Service Quality** Presenter: Yong Paek, The Brattle Group Additional authors: Kia Liao, Rice University, Coleman Bazelon, The Brattle Group, Paroma Sanyal, The Brattle Group and Preetul Sen, The Brattle Group

11:00 - 12:35	Telecoms in Emerging Markets	Satellite & Space Economy	Artificial Intelligence and Algorithmic Literacy	Antitrust & Competition	Spectrum Management
	Room YT17	Room Y403	Room Y402	Room NT08	Room NT01
	Discussant: Cole Campbell	Discussant: Ed Oughton George Mason University	Discussant: Marjory S. Blumenthal MSBlumenthal, LLC	Discussant: Gus Hurwitz University of Pennsylvania	Discussant: John Chapin National Science Foundation
11:01 -11:31	**Estimating the impact of Value Added Tax exemptions on smartphone penetration in Colombia using the synthetic control method** Presenter: Sindhura Kammardi Sachidananda, University of Pennsylvania Additional authors: Leon Gwaka, University of Pennsylvania, and Christopher Yoo, University of Pennsylvania	**Dangers From the Regulatory Vacuums in Outer, Inner, and Near Space** Presenter: Rob Frieden, Penn State University	**A Call for Promoting Algorithmic Literacy** Presenter: Bryan Boots, University of Missouri-Kansas City Additional authors: Alex Matlack, University of Missouri-Kansas City and Theo Richardson-Gool, University of Missouri-Kansas City	**Regulatory Treatment of Specialized Services** Presenter: Scott Jordan, University of California, Irvine	**Event Detection and Sharing in 6, 7 and 12 GHz bands** Presenter: Prashant Krishnamurthy, University of Pittsburgh Additional authors: David Tipper, University of Pittsburgh, and Ilia Murtazashvili, University of Pittsburgh VIRTUAL
11:33 – 12:03	**5G Telecom Infrastructure Investment in Technology Emergent Markets: An Economic Revision for Vendor Partners Selection** Presenter: Silvia Monica Elaluf-Calderwood, Florida International University	**Cyber sovereignty and space sustainability: A case study of mega-constellations** Presenter: Berna Akcali Gur, CCLS, Queen Mary University of London Additional author: Joanna Kulesza, University of Lodz	**Algorithmic Bias, Marketplaces, and Diversity Regulation** Presenter: Lance Yong Jin Park, Howard University and BKC, Harvard Law	**Antitrust and the Internet Markets: Bork's Deception** Presenter: James Alleman, University of Colorado – Boulder	**Automating Spectrum Sharing from the Ground Up** William Lehr, MIT, Randall Berry, Northwestern University, Igor Kadota, Northwestern University and Carlos Bastidas, Syracuse University, Kangle Mu, Northwestern University, Zongyun Xie, Northwestern University and Irfan Tamin, Columbia University
12:05 – 12:35	**Disaggregating Digital Inequalities: Survey-based Estimates of Ownership and Use of Digital Technologies in Low- and Middle-income Economies** Presenter: Sharada Srinivasan, World Bank and Oxford University	**Assessing the Impacts of Low-Earth Orbital Satellite Systems in Remote Indigenous Communities: A Case Study in Canada's Northwest Territories** Presenter: Rob McMahon, University of Alberta Additional authors: Murat Akcayir, University of Alberta, Brenda Norris, Native Women's Association of Canada and Lyle Fabian, KatloTech Communications Ltd.	**Same goal, different paths: Contrasting approaches to AI regulation in China and India** Presenter: Richard Taylor, Pennsylvania State University Additional authors: Krishna Jayakar, The Pennsylvania State University, Chun Liu, University of Electronic Science and Technology of China, and Puxin Zhang, Southwest Jiaotong University	**Media Ownership and Concentration in the United States of America 1984-2022** Presenter: Jason Buckweitz, Columbia University Additional author: Eli Noam, Columbia University	
2:05 - 3:35	**Panel Sessions**				
	Policy dimensions to commercialization strategies in NASA's Space Communications and Navigation (SCaN) program NT08	**Digital Regulatory Agencies: Reboot, Retrofit, and Reform. Perspectives from regulators in USA, EU, Asia, Latin America and Africa** Room Y402	**Towards 6G** Room NT01	**How Do We Define "Good" Broadband in the Future? Evolving Internet Performance Metrics to Support the Policy Objectives of Broadband Universal Service** Room YT17	

4:00-5:35	Internet Connectivity and Resilience	Smart Cities & Data Governance	AI Governance & Regulation	Spectrum Sharing and Management	Internet Competition
	Room YT17	Room Y403	Room Y402	Room NT01	Room NT08
	Discussant: Josephine Wolff, Tufts University	Discussant: Madelyn Sanfilippo University of Illinois	Discussant: Chris Marsden, Monash University	Discussant: Martin Weiss US Dept of Defense	Discussant: David Reed University of Colorado Boulder
4:01 – 4:31	**The Economics of DDoS Mitigation and Changing Internet Protocols** Presenter: Samuel DeLaughter, MIT, UCSD CAIDA Additional authors: Karen R. Sollins, MIT, and William H. Lehr, MIT	**Smart Cities and data governance models** Presenter: Krishna Jayakar, The Pennsylvania State University	**Rethinking AI Governance: The Political Economy of the Digital Ecosystem** Presenter: Milton Mueller, Georgia Institute of Technology, Internet Governance Project	**An Open-Access Market for Global Communications** Presenter: Peter Cramton, University of Maryland Additional authors: Erik Bohlin, Ivey Business School, Simon Brandkamp, University of Cologne, Jason Dark, Cramton Assoc,, Darrell Hoy, Cramton Assoc,, Albert S. Kyle, University of Md, David Malec, University of Md, Axel Ockenfels, University of Cologne, Chris Wilkens, Cramton Associates	**Who Pays for Internet Traffic? Navigating the Economics of ISP and Content Provider Interconnections** Presenter: Ali Nikkhah, University of California, Irvine Additional author: Scott Jordan, University of California, Irvine
4:33 – 5:03	**The Impact of Internet Connectivity in Navigating Online Social Networks: A Cross-Country Analysis** Presenter: Alex Matlack, University of Missouri - St. Louis, Additional authors: Bryan Boots, University of Missouri-Kansas City and Theo Richardson-Gool, University of Missouri-Kansas City	**Cities, AI and Local Policies: Laboratories of Limitation** Presenter: Sharon Strover, University of Texas at Austin Additional author: Sheila Lalwani, University of Texas at Austin	**AI governance: Compromising democracy or democratising AI?** Presenter: Mehmet Unver, University of Hertfordshire	**Dynamical electrospacetime model as a tool for spectrum management** Presenter: Prasanth Prahladan, University of Colorado Boulder Additional authors: Dirk Grunwald, University of Colorado Boulder, and Sangtae Ha, University of Colorado Boulder	**Does Pricing of Internet Usage Steer Consumers or Meter Usage? Evidence from a Pricing Experiment** Presenter: Zachary Nolan, University of Arizona Additional Authors: Jonathan Williams, UNC at Chapel Hill, Brian McManus,UNC at Chapel Hill, and Aviv Nevo, University of Pennsylvania
5:05 – 5:35	**(Reimagining) Resilience Goals for the Internet** Presenter: Cecilia Testart, Georgia Institute of Technology Additional authors: Volker Stocker, Weizenbaum Institute for the Networked Society, David Clark, MIT, and Bill Lehr, MIT	**Deployment and testing of a Digital Rights Platform that grants smart city residents more agency over their personal data** Presenter: Gwen Shaffer, California State University Long Beach	**Aligned with the Blueprint for an AI Bill of Rights? An AI Transparency Evaluation of Company Privacy Notices and Explanations** Presenter: Jonathan Obar, York University Additional authors: Giuseppina (Pina) D'Agostino, York University and Motunrayo Akinyemi, York University	**Decolonizing Dynamic Spectrum Sharing** Presenter: Darrah Blackwater, Blackwater Consulting Additional authors: Ilia Murtazashvili, University of Pittsburgh and Kevin Gifford, Colorado University- Boulder VIRTUAL	**Moving Toward a Continuum Model for Broadband Affordability** Presenter: Colby Humphrey, Broadband Access Initiative, The Pew Charitable Trusts Additional authors: Elizabeth Mack, Michigan State University and John Horrigan, Benton Institute for Broadband & Society
5:45 - 6:30	**Poster Sessions See posters listed below**	**Meet the Author Tables**			

Sessions Saturday September 21

9:00 - 10:40	Broadband Access and Digital Equity	Broadband Equity, Access and Development	Internet Measurements	Spectrum Management and Access Strategy	Sustainability in Technology
	Room NT07	Room NT08	Room Y116	Room NT01	Room YT17
	Discussant: James Prieger Pepperdine University	Discussant: Amit Schejter Ben Gurion University and Penn State	Discussant: Jonathan Liebenau London School of Economics	Discussant: Peter Tenhula University of Colorado	Discussant: Graham Dufault ACT
9:01 – 9:31	**Beyond Access and Infrastructure:Evaluating the Impact of Local Contexts on Digital Equity Strategies through the Lens of the Digital Opportunities Compass** Presenter: Pierrette Dagg, Merit Network/University of Michigan Additional authors: Colin Rhinesmith, Digital Equity Research Center, Megan Knittel, Michigan State University, Joon Oh, University of Michigan	**The BEAD Challenge Process: A Viable Route to Public Involvement in Improving Broadband Infrastructure?** Alexis Schrubbe, University of Chicago, Matthew Triano, University of Chicago, Henna Zamurd-Butt, University of Chicago, Nicole Marwell, University of Chicago and Nick Feamster, University of Chicago	**Critical Analysis of the Inclusivity of Crowdsourced Internet Measurement Apps** Presenter: Morgan Vigil-Hayes, Northern Arizona University Additional authors: Italo Santos, Northern Arizona University, and Dayra Quiñonez, Northern Arizona University VIRTUAL	**Evaluating The National Spectrum Strategy** Presenter: Michael Honig, Northwestern University Additional authors: Randall Berry, Northwestern University, and Thomas Hazlett, Clemson University	**Twin Transitions Across Enterprises: Do Digital Technologies and Sustainability Go Together?** Presenter: Gretta Mohan, The Economic and Social Research Institute Additional authors: Iulia Siedschlag, The Economic and Social Research Institute and Weijie Yan, E. CA Economics
9:33 – 10:03	**Broadband Affordability: The Metrics that Drive and Divide Us** Presenter: Stacey Baxter, Next Century Cities Additional author: Corian Zacher, Next Century Cities	**Police Power and Utilities Law: Regulatory Conflicts between BEAD Funding and State Preemption Statutes Restricting Municipal Broadband** Presenter: Benjamin W. Cramer, Pennsylvania State University	**Measurement of Internet access latency: A cross-dataset comparison** Presenter: David Clark, CSAIL/MIT Additional author: Sara Wedeman, MIT	**Winning the 6G sweepstakes: Comparative analysis of national innovation strategies and industrial policy** Presenter: Dongwook Jeong, The Pennsylvania State University Additional author: Krishna Jayakar, The Pennsylvania State University	**ICT Sustainability Reporting Strategies of Large Tech Companies: Changes in Format, Scope, and Content** Volker Stocker, Weizenbaum-Institute for the Networked Society, Niklas Mariotte, Weizenbaum-Institute for the Networked Society, André Ullrich, Weizenbaum- Institute for the Networked Society and David Rejeski, Weizenbaum-Institute for the Networked Society
10:05 – 10:35	**The Economics of Universal Service Fund Reform** Presenter: Paroma Sanyal, The Brattle Group Additional authors: Coleman Bazelon, The Brattle Group and Yong Paek, The Brattle Group	**Anchor Institutions as the Nexus: The Role of Community Anchor Institutions in State BEAD and Digital Equity Strategies and Policies** Presenter: Emily Rubin, University of Texas at Austin **WITHDRAWN**	**Investment and Usage of the Subsea Internet Cable Network**; Presenter: Marc Rysman, Boston University Additional author: Jihye Jeon, Boston University	**The impact of Spectrum Set-Asides on Private and Public Mobile Networks** Presenter: Kalvin Bahia, GSMA Additional author: Pau Castells, GSMA and Jakub Zagdanski, GSMA	**Mapping Cellular Network Evolution and Infrastructure Criticality: A Nationwide Analysis** Presenter: Varshika Srinivasaradhan, University of California, Santa Barbara Additional authors: Owen Park, UCSB and Elizabeth Belding, University of California, Santa Barbara

11:00 -12:35	Affordable Connectivity	Broadband and Health	Internet Measurements	Privacy	Data and Technology Access
	Room NT07	Room NT08	Room Y116	Room NT01	Room YT17
	Discussant: Roslyn Layton Aalborg University	Discussant: Michael Calabrese Open Technology Institute	Discussant: Dhanaraj Thakur CDT	Discussant: Jon Peha Carnegie Mellon University	Discussant: Sharon Strover University of Texas at Austin
11:01 -11:31	**Too much fibre, too many companies? An exploratory analysis of altnets in the UK** Presenter: Jason Whalley, Northumbria University	**Investigating Health Outcomes Among Recipients of the Affordable Connectivity Program** Presenter: Erezi Ogbo-Gebhardt, North Carolina Central University	**PKI Incident Reporting Trends: What can we learn from community reporting?** Presenter: Jacob Abbott, Indiana University Additional authors: Skyler Johnson, Indiana University, Katherine Ferro, Indiana University, Phenzi Blasio, Indiana University, Eric Swiler, Indiana University, and L. Jean Camp, Indiana University	**Understanding People's Personalized and Contextual Choices of Differential Privacy: A Proof-of-Concept Survey** Presenter: Kyrie Zhixuan Zhou, University of Illinois at Urbana-Champaign Additional author: Madelyn Sanfilippo, University of Illinois at Urbana-Champaign	**Unlocking Platform Data for Research** Presenter: Niva Elkin-Koren, Tel Aviv University Faculty of Law Additional authors: Maayan Perel (Filmar), Netanya Academic College and Ohad Somech, Netanya Academic College
11:33 – 12:03	**A preliminary impact evaluation of the ACP program** Presenter: Hernan Galperin, University of Southern California Additional authors: François Bar, University of Southern California and Angel Chavez Penate, University of Southern California	**Did those most vulnerable to COVID-19 in the U.S. receive timely and accessible public health information?** Presenter: Salimah LaForce, Georgia Institute of Technology Additional author: Dara Bright, Drexel University VIRTUAL	**Identifying Current Barriers in RPKI Adoption** Presenter: Josephine Wolff, Tufts University Additional authors: Cecilia Testart, Georgia Institute of Technology, Deepak Gouda, Georgia Institute of Technology, and Romain Fontugne, Internet Initiative Japan	**Incentives for Industry and Benefits for Users: Post-Roe Data Privacy** Presenter: Judith Rector, Michigan State University Additional author: Ruth Shillair, Michigan State University	**The Publication Fate of Conference Papers** Presenter: Janice Hauge, University of North Texas
	Predicting the rate of adoption of the Affordable Connectivity Program (ACP) among eligible households: A diffusion model with panel data Presenter: Christopher Ali, Penn State University Additional authors: Dongwook Jeong, Penn State University Ryan Yang Wang, Rochester Institute of Technology, Krishna Jayakar, Penn State University, Sascha Meinrath, Penn State University, and Sydney Forde, Penn State University		**From Connection to Coordination: High-Speed Internet and Protests in Africa** Presenter: Jean-Baptiste Guiffard, Paris 1 Panthéon-Sorbonne *Student Paper Winner*	**Exploring the Limits of Differential Privacy** Presenter: Simson Garfinkel, Harvard University Additional authors: David Clark, CSAIL/MIT and kc Claffy, CAIDA/UCSD	**"Everything is technology": examining technology access and use among returning citizens** Presenter: Kaelyn Sanders, Michigan State University School of Criminal Justice *Student Paper Winner*
2:00 - 3:30	**Panel Sessions**				
	Spectrum Management and Wireless Policy Challenges and Opportunities NT01	**The State of AI Governance in the African Union YT17**			

4:00-5:35	Rural and Remote Broadband	Social Media	Securing the Digital Economy	Data Privacy and Algorithms	Broadband & Digital Equity
	Room NT07	Room NT08	Room Y116	Room NT01	Room YT17
	Discussant: Sarah Oh Lam Technology Policy Institute	Discussant: Marcela Gomez, University of Pittsburgh	Discussant: Volker Stocker Weizenbaum Institute for the Networked Society	Discussant: Robin Mansell London School of Economics	Discussant: Richard Taylor Penn State University
4:01 – 4:31	**Analyzing Broadband Reliability: Insights from Alaskan Arctic Communities** Presenter: Karl Grindal, University of New Hampshire Additional author: Sascha Meinrath, Pennsylvania State University	**Digital Jurors: Social Media Communal Content Moderation as Civic Participation** Presenter: Kaiyi Yu, University of Minnesota, Twin Cities	**Modelling the Economic Impact of Cloud for Development: An Analysis of Banking, E-Commerce and Telecoms in Egypt, Indonesia, Kenya, Mexico, and Turkey** Presenter: Jonathan Liebenau, London School of Economics Additional author: Patrik Karrberg, University College, London	**Algorithmic Profiling and the Threat to Religious Expression: The Case of Muslim Pro** Presenter: Ahmed Al Rawi, Pennsylvania State University	**India's Digital Divide: A Multivariate and Geospatial Analysis** Presenter: Avijit Sarkar, University of Redlands Additional authors: James Pick, University of Redlands, and Priyanka Somai, University of Redlands
4:33 – 5:03	**Mobile Internet Services in Northern Indigenous contexts: Exploring mobile access, usage and dependencies in rural/remote communities in the Northwest Territories, Canada** Presenter: Murat Akcayir, University of Alberta Additional authors: Rob McMahon, University of Alberta; Brenda Norris, Native Women's Association of Canada and Lyle Fabian, KatloTech Communications Ltd	**Reporting Image-Based Sexual Violence: Deepfakes, #ProtectTaylorSwift, and Platform Responsibility** Presenter: Martin Riedl, The University of Tennessee, Knoxville Additional author: Ariel Newell, The University of Tennessee, Knoxville	**Governance Implications Toward Safer Online Blockchain Communities: A Case Study of Bored Ape NFTs** Presenter: Allison Sinnott, Long Island University Post Additional author: Kyrie Zhixuan Zhou, University of Illinois at Urbana-Champaign	**The Case for (Meta)data Privacy: Applying Carpenter to Browser Fingerprints** Presenter: Rohan Grover, University of Southern California *Student Paper Winner*	**Public Libraries, Digital Equity Coalitions, and The Public Good** Presenter: Colin Rhinesmith, Digital Equity Research Center
5:05 – 5:35	**Rural and Indigenous Broadband: An Analysis of Funding Strategies in the U.S. and Canada** Presenter: Heather Hudson, University of Alaska Anchorage	**Deepfaking medical images: Eroding trust in medical diagnosis** Presenter: Jack Waier, Michigan State University Additional author: Ruth Shillair, Michigan State University	**A path forward: Improving Internet routing security by enabling zones of trust** Presenter: kc Claffy, CAIDA/UCSD Additional authors: David Clark, CSAIL/MIT Cecilia Testart, Georgia Tech, Matthew Luckie, CAIDA/UCSD	**Exploring Paths to a U.S. Digital Skills Framework (And Why We Need One) A Framework for Measuring Digital Literacy Rates in the United States** Presenter: Jessica Dine, Open Technology Institute at New America	**The contribution of US broadband infrastructure subsidy and investment programs to GDP using Input-Output modeling** Presenter: Matthew Sprintson, George Mason University and Yale University Additional author: Edward Oughton, George Mason University

Pre-Conference Tutorial

Thursday, September 19, 2:00 pm

Emerging Cybersecurity Policy for Emerging Technologies (NT01)

Description

There has been a rapid growth in emerging technologies in the past few years, like Artificial Intelligence, Interconnected Devices, and Quantum Computing. With increasing network connectivity, concerns about cybersecurity and privacy issues in these areas have also been on the rise. This has led to a renewed focus in these areas from policy makers. To ensure that any subsequent policy interventions are effective, we need to identify key opportunities and challenges in these domains. Hence, this tutorial aims to bring together a diverse group of experts that includes members from industry, standards organizations, government, and academia to discuss some of the open problems, upcoming policy issues and challenges from emerging technology.

Agenda at a Glance

2:00-2:05 pm	Opening Remarks Marcela Gomez, TPRC Chair
2:05-2:30 pm	Opening Keynote: NIST and Emerging Technologies Speaker: Cherilyn Pascoe, NCCoE *Introduced by: Sudhanshu Kairab, Comcast*
2:30-3:10 pm	Panel 1: Routing Security Instructor: Tony Tauber, Comcast Panelists: Kathryn Condello, Lumen, Robert Cannon, NTIA, Rikin Thakker, NCTA
3:10-3:15 pm	Short Break
3:15-3:30 pm	Lightning Talk: Vulnerability Metrics Instructor: Savanah Courtney, CISA
3:30-3:45 pm	Afternoon Keynote: IoT CyberTrust Mark Speaker: Commissioner Geoffrey Starks, FCC *Introduced by: Lisa Fowlkes, Comcast*
3:45-3:55 pm	Break
3:55-4:35 pm	Panel 2: IoT Security Instructor: Michael Bergman, CTA Panelists: Katerina Megas, NIST, Brian Scriber, CableLabs, Jean Camp, Indiana University
4:35-4:40 pm	Short Break
4:40-4:55 pm	Lightning Talk: The Engineer Who Cried Quantum Instructor: Vaibhav Garg, Comcast
4:55-5:20pm	Closing Keynote: Outlook from the Office of National Cyber Director Speaker: Harry Wingo, Deputy National Cyber Director (White House) *Introduced by: Rudy Brioché, Comcast*
5:20-5:25 pm	Closing Remarks Jayati Dev, Comcast

Lightning Talks

Stuff off Search

On behalf of CISA's cybersecurity division, Ms. Courtney will be briefing on current vulnerability conditions of the Comms sector according to CISA Cyber Hygiene vulnerability scan data and other industry data sources. Internet-facing vulnerabilities paired with threats targeting communications infrastructure paint the risk posture of the sector, especially in the context of nation-state actors looking to preposition themselves in the midst of geopolitical conflict. The talk will give a brief overview of CISA's priorities in securing the nation's critical infrastructure and the role that communications entities have to support the effort toward resilience.

The Engineer Who Cried Quantum

Migration to quantum resistant cryptography may be one of the biggest technological transitions faced by the modern Internet infrastructure. Previous transitions, such as those from IPv4 to IPv6 or from SHA1 to SHA2, offer some insights; yet this new migration is different both qualitatively and quantitatively. Qualitatively, these PQC algorithms are fundamentally different from classical algorithms and thus may require redesign of core components of the Internet. Quantitatively, this transition will require upgrades across a range of infrastructure capabilities. This talk will present a quick overview of the various challenges inherent in this transition and the investments being made by to address them.

Panels

Routing Security

This panel will highlight opportunities in improving routing security through discussion of existing frameworks, challenges, and the road ahead.

IoT Security

This panel will discuss the development of the FCC CyberTrust Mark for IoT device security – and community efforts in the area to create technical specifications for certification in both security and privacy.

Panel Descriptions
Friday, September 20, 2:05 pm Panels

Policy dimensions to commercialization strategies in NASA's Space Communications and Navigation (SCaN) program (Room NT08)

This panel will discuss three key policy issues. Firstly, what can be learned from past government policy decisions to purchase commercial communications services? Secondly, what should NASA's role be in different commercial models, and what might the advantages or disadvantages of various approaches be? Finally, how should NASA optimize the benefits of having a competitive market place, versus the economies of scale benefits of bulk purchasing?

Panelists include:
      Gregory Heckler, Program Executive for Commercialization at NASA SCaN
      Robert Conrad, Vice President of Business Development, Kepler Communications
      Erica Lieb Weir, Teltrium Strategic Director
      Philip Harlow, President of Telesat Government Solutions
      Edward Oughton, Assistant Professor, George Mason University (Moderator)

Towards 6G (Room NT01)

If previous timeframes are to be followed, the next generation cellular system, 6G, can expect to roll out around 2030 (i.e., just 6 years from today). Consequently, discussions in the 3GPP and ITU on the development of 6G standards will begin in 2024. Thus, it is timely and relevant to bring together experts who are considering the technical, economic, policy, and regulation that surround the expectations of this emerging standard. In this light, multiple questions need to be addressed to start defining the new standard from multiple perspectives. These questions include but are not limited to the following: Should 6G be 10x faster than 5G? Should it be a lower cost than other standards (e.g., 5G) to reduce the digital divide? Should it focus on programmability and customization? How should spectrum

sharing be incorporated into this new standard? The panel will address these and other topics that are likely to emerge over the next several months.

Moderator:
  Dominique Lazanski, Independent Consultant

Invited panelists:
  Martin Weiss, University of Pittsburgh, SpectrumX
  Monisha Ghosh, Director of Policy Outreach, SpectrumX
  Mohamed Al-Moghazi, Telecom Regulatory Authority, Egypt
  Colby Harper, WINNForum

Digital Regulatory Agencies: Reboot, Retrofit, and Reform. Perspectives from regulators in USA, EU, Asia, Latin America and Africa. (Room Y402)

This panel compares and contrasts how regulatory agencies and approaches are emerging in different regions to address digital challenges and opportunities. The audience will learn whether and how nations decide to address problems with current resources, reform existing regulatory agencies, create new ones, or leave the problems alone. The panelists are leading authors and regulators who will describe the dynamic landscape of digital technologies, their impact on various sectors, and the role of a digital regulatory agencies for these areas. They will discuss the challenges that digital regulatory agencies face--promoting innovation and consumer protection, managing data privacy and security, and balancing free speech and misinformation. The panel will cover a wide range of topics related to a government agency's role and responsibilities in overseeing the digital landscape. Speakers present international perspectives on how digital regulatory agencies are emerging in US, EU, Asia, Latin America and Africa.

Moderator:
  Ian MacInnes, University of Nebraska Omaha

Panelists:
  Thomas Wheeler, former Chairman, Federal Communications Commission, Brookings Institute. Author of **Techlash: Who Makes the Rules in the Digital Gilded Age?**
  Lawrence J. Spiwak, President of the Phoenix Center for Advanced Legal & Economic Public Policy
  Roxana Barrantes, Institute of Peruvian Studies
  Toshiya Jitsuzumi, Chuo University, Japan
  Lisa Agard, Chair, Chair of the C9, a CANTO Working Group of Caribbean Telecommunications Operators

How Do We Define "Good" Broadband in the Future? Evolving Internet Performance Metrics to Support the Policy Objectives of Broadband Universal Service (Room YT17)

The Broadband Equity, Access, and Deployment (BEAD) Program in the U.S. has directed $42.45 billion in funding to accelerate the development and deployment of broadband infrastructure that meets specific service requirements such as minimum service speeds of 100 Mbps in the downstream and 20 Mbps in the upstream, peak hour latency below 100 ms, and network reliability of no more than 48 hours of outage time over any 365-day period. An often-overlooked element to the development of these requirements are the substantial policy implications they carry for determining preferred local access network technology options, preferred broadband service operators based upon their legacy technology positions, and the overall degree to which the nation's households are unserved and underserved in terms of broadband access. Moreover, the performance requirements can influence the design and evolution of the Internet architecture itself by influencing the selection or implementation of protocols and measurement metrics used by broadband network operators. To date in the U.S., Broadband Internet Access Service (BIAS) performance requirements have been developed in a number of different policy efforts such as the FCC's annual Section 706 inquiries since the 1996 Telecom Act, part of the FCC's universal service broadband funding programs since the National Broadband Plan (beginning with CAF Phase I and II, ACAM, and then RDOF), or adopted for broadband funding programs passed by Congress (such as Treasury's Capital Project Fund and now the NTIA's BEAD program).
This panel will investigate various policy concerns that arise from the lack of a consistent policy framework for defining BIAS performance requirements by addressing the following questions:

1. Prior Efforts to Characterize Performance-Related Policy Concerns.
2. How has Internet Performance Changed Over Time?
3. Increasing Importance of Latency in Internet Performance using Internet Engineering Task Force's (IETF) Low Latency Low Loss Scalable Throughput (L4S) open standards.
4. Anticipated New Requirements from Emerging Internet Applications.
5. Putting It All Together: How Should Broadband Funding Be Linked to Internet Performance Requirements?

Panelists:
Mike Conlow, Director of Network Strategy, Cloudflare.
Jason Livingood, Vice President of Technology Policy, Product & Standards, Comcast
Carol Mattey, Mattey Consulting LLC.
David Reed, Scholar in Residence and Senior Research Associate in the Computer Science Department, University of Colorado Boulder and Senior Fellow, Silicon Flatirons Center for Law, Technology, and Entrepreneurship at the CU Law School.

Saturday, September 21, 2pm

Spectrum Management and Wireless Policy Challenges and Opportunities (Room NT01)

Discussion topics may include the influence of emerging technologies such as open and virtual networks, artificial intelligence, machine learning, and quantum computing; security and privacy issues; and economic, market, and societal concerns and solutions.

Overall, the panel aims to generate discussion around key opportunities for successful spectrum management and wireless policy. What are important lessons learned, nationally and from other countries? What worked well, what research is needed, and how best to leverage the opportunities?

Panelists:
Preston Marshall, Director, Wireless Standards and Policy, Google Internet Evangelism; Chairman of the Board, OnGo (CBRS) Alliance; Co-Chair, Spectrum Sharing Committee, Wireless Innovation Forum
Giulia McHenry, Chief, Office of Economics and Analytics at Federal Communications Commission
Shiva Goel, Senior Advisor, NTIA
Jennifer Warren, Vice President, Regulatory Affairs & Public Policy, Lockheed Martin
Monisha Ghosh, Policy Outreach Director at Spectrum X and Professor of Electrical Engineering at University of Notre Dame
Carolyn Kahn, MITRE, moderator

The State of AI Governance in the African Union (Room YT17)

As the United States and European Union opine upon the future of AI governance, having leaders from the African Union at the table can ensure international cooperation, as well as a geopolitical focus. For example, as many new concerns arise around the negative impacts of AI (e.g., bias, data privacy, etc.), the West primarily dominates the conversation, excluding African countries with similar challenges. In this panel, experts in AI, data privacy, and global governance address how to ensure greater participation from the African Union to truly encourage multilateral conversations, and explore areas of alignment, and differences in existing and future governance strategies. The panelists will also bring up specific use cases of AI that are of high priority and concern to the continent.

Panelists:
Nicol Turner Lee, Senior Fellow and Director, Center for Technology Innovation, Brookings Institution and author Digitally Invisible: How the Internet is Creating the New Underclass (Moderator)
Chinasa T. Okolo, Fellow, Brookings Institution and Consulting Expert, the AU-AI Continental Strategy for Africa
Ololade Shyllon, Head of Privacy Policy, Africa, Middle East, and Turkey, Meta
Landry Signe, Distinguished Fellow, Center for African Studies, Stanford University and Chairman, the Global Network for Africa's Prosperity

Poster Session
Friday, September 20, 5:45 pm

An Analysis of Incorrectly Issued Public Key Certificates
Skyler Johnson, *Indiana University,* Katherine Ferro, *Indiana University,* Phenzi Blasio, *Indiana University,* Jacob Abbott, *Indiana University* and L Jean Camp, *Indiana University*

From Twttr to 'X': Tracing Twitter's Journey as a Platform for Free Speech and Social Mobilization in the US and Nigeria
Akintunde Babatunde, *University of Iowa* and Rita Zajacz, *University of Iowa*

Making Ripples of Change: Advancing Digital Equity in MD through Anchor Institution Collaboration
Uhjin Sim, *University of Maryland,* Mega Subramaniam, *University of Maryland,* Alison Harding, *University of Maryland,* Jane Behre, *University of Maryland* and Regina Paige, *Enoch Pratt Free Library*

QAnon Platform Migration: Comparing Group Participation on Twitter, Parler, & Dotwin
Aly Hill, *The University of Utah,* Naman Rastogi, *The University of Utah* and Marina Kogan, *The University of Utah*

Rethinking Mobile Money Taxation in Africa: An Exploratory Actor-Network Study
Yaw Julius Asamoah, *Jayee University,* Olivia Duah-Barning, *Central University Accra Ghana* and Abbey Hilda Affiah, *Central University Accra Ghana*

The case for a Critical Media Infrastructure Monitor: Analyzing the control points reshaping the media model and market
Juan Ortiz Freuler, *University of Southern California*

The Electronic Transaction Levy in Africa Threatens Mobile Money and the Cash-Lite Economy
Julius Asamoah, *ACCRA TECHNICAL UNIVERSITY – ATU,* Annan Dorcas Nyarkoa, *Ghana Communication Technology University,* and Benjamin Sackey, *Methodist University College of Ghana (Accra, Ghana)*

Meet the Author
Friday, September 20, 5:45 pm
Discuss these exciting new books with their authors.

Nicol Turner Lee, Brookings Institution
Digitally Invisible: How the Internet is Creating the New Underclass

Richard Whitt, GliaNet Alliance
Reweaving the Web

Amit Schejter, Ben Gurion University and Penn State University
Digital Capabilities: ICT Adoption in Marginalized Communities in Israel and the West Bank

Eli Noam, Columbia Institute for Tele-Information
AI-Video