Date	Topic Name	Time Slot	Location	Speakers	Description
09/23/2024	SCTE® Broadband Fiber Installer Boot Camp (separate registration required)	9:00 AM to 5:30 PM EST			Based on SCTE's BFI course and taught by an industry-certified expert  Equips learners with the expertise required to earn SCTE's nationally recognized BFI professional certification  Includes a hands-on vendor presentation and an instructor-led tour of the TechExpo floor during show hours  Includes registration for the online BFI course and professional certification exam SCTE Members \$250   Non-Members \$350  Registration includes lunch and coffee breaks during the daylong training. Registration does not include access to TechExpo; a separate registration is required.  Register here
09/23/2024	SCTE® Standards Program Interface Practices Subcommittee (IPS) Plenary	1:00 PM to 3:30 PM EST	B315		Open to all members of the SCTE Standards program. To attend as a guest, please contact admin@standards.scte.org before the meeting.
09/23/2024	The Human Factor  Masterclass: Cultivating Your Ideation Toolkit and Innovation Mindset	2:00 PM to 3:30 PM EST		Phil McKinney CEO CableLabs  Lisa Schwab Director of Strategic Growth Engagement CableLabs  Todd Bryan Principal Strategist CableLabs  Michelle Vendelin Director, Innovation Services & Coaching CableLabs  Hans Geerdes Principal Strategist CableLabs	Boost your creative confidence to tackle tough problems and generate innovative ideas  Develop a robust ideation practice with tools and techniques for physical, digital, and Generative AI ideations  Engage in practical, hands-on group activities to solve industry challenges and walk away with actionable solutions  Bring your laptop and preferred  Generative AI application—let's innovate together!
9/23/2024	Peeking Into the Future	3:00 PM - 4:30 PM	B302		Showcasing the latest innovative learning solutions that redefine the standards of our services and products  Ensuring solutions meet real-world needs and expectations  Future insights: features, enhancements, and new offerings  To request an invitation, please contact the SCTE Learning & Development team.

9.23.2024	Cable TV Pioneers 58th Annual Banquet	6:00 PM - 10:00 PM EST			Separate event ticket purchase required  Event details can be found here.
9.24.2024	Light Reading Breakfast: Making the Most of Cable and Fiber	7:30 AM - 8:50 AM EST		Jaimie Lenderman Research Manager and Principal Analyst Omdia  Damian Poltz Senior Vice President, Wireline Networks Rogers Communicatio ns  Erik Kuhlmann Sr. Director, Engineering & Architecture, Planning & Design GCI	Facing escalating competition from both fiber-to-the-home (FTTH) and fixed wireless providers, cable operators are increasingly pursuing a dual strategy – upgrading their legacy hybrid fiber-coax (HFC) networks in some areas while building new fiber networks in others. At the same time, cablecos are deploying a slew of next-gen technologies — ranging from DOCSIS 4.0 to XGS-PON to Distributed Access Architecture (DAA) to spectrum mid-splits and high-splits to network virtualization to network automation — to maximize the benefits of both their HFC and FTTH platforms.  But this transition to next-gen networks is not a simple process as cable technologists grapple with the hefty challenges of their massive plant upgrades. These challenges include network reliability, scalability and powering issues, equipment replacement and upgrades, high capital expenses and unprecedented operational complexity. What upgrade strategies and techniques are operators and vendors developing and deploying? Which ones are working out so far and why? What obstacles are operators and their tech partners encountering? How are they attempting to overcome
9.24.2024	Chapter Leadership Breakfast	7:30 AM - 8:45 AM EST	B302		The chapter leaders that help support and run the over 60 SCTE local chapters are invited to join us for breakfast. Chapter leaders will be able to network with other chapters and learn the latest happening at SCTE.
9.24.2024	Opening Headliners	9:00 AM - 10:30 AM EST	Murphy Ballroom - Main Stage	Balan Nair President and Chief Executive Officer Liberty Latin America  Phil McKinney CEO CableLabs  Julie Laulis Chair of the Board, President and Chief Executive Officer Cable One  Ken Johnson Chief Operating Officer Cable One  Mark Greatrex President Cox Communicatio	TechExpo headliner speakers are leaders setting the bold vision to shape the world of broadband connectivity and the workforce powering it. During this session, SCTE will honor the outstanding achievements in our industry over the past year, including the recognition of the SCTE Member of the Year.

	I				
				ns  Maria Popo President and CEO SCTE  Nicole Scoble-Willia ms Partner, Global Future of Work Leader Deloitte	
9.24.2024	Technology Policy  GenAl: Risks and Benefits	10:45 AM - 11:45 AM EST		Russell Hanser Deputy Chief Legal Officer NCTA – The Internet & Television Association	Over the past two years, generative artificial intelligence – GenAl – has raced from the periphery of tech policy debates to the center of Americans' daily lives. "Synthetic" Al-generated content can be virtually indistinguishable from "authentic" content created by humans, giving rise to great benefits and great risks.  The rise of GenAl raises critical policy questions regarding a host of topics, from the political, economic, security, and other threats posed by mis- and dis-information to creators' intellectual property rights in the works used to "train" Al models to the impacts of "deepfakes" and synthetic content on public trust.  This panel of government and academic experts will address the cutting-edge policy issues raised by GenAl, discussing how we can best harness this technology's many benefits while mitigating or eliminating associated risks
9.24.2024	Exhibition Open	10:45 AM - 6:00 PM EST			
9.24.2024	The Human Factor Interview: Al and the Future of Learning	11:00 AM - 11:30 AM EST	The Loft	Jill Banks Director, Learning Operations SCTE  Dr. Keith McGreggor Professor of the Practice Georgia Tech	Understanding the potential role of Al in learning and development Exploring how Al is reshaping how we learn, train, and develop skills Lessons learned: How to implement Al across your training and development needs
9.24.2024	The Human Factor  Al Unleashed: Practical Strategies for Your Organization	11:30 AM - 12:10 PM EST	The Loft	Rodney Richter Chief Technologist HPE  Wayne Coyle Director of Service Delivery Adrentech  Dr. Mark Burke Senior Director, Learning Strategy Judge Learning Solutions  Kelli Southern AVP, Talent and	Examining strategies to effectively integrate artificial intelligence into the workforce  Exploring how to structure Al initiatives: Securing executive buy-in  Overcoming resistance to change Setting up dedicated Al teams and partnerships  Gaining insights on emerging trends to harness Al's potential within organizations effectively

9.24.2024	Women's TechConnect Program Graduation Lunch	12:00 PM - 2:00 PM	B301	Skills Cox Communicatio ns Erica Yin Director, Watsonx IBM	The TechConnect initiative — developed collaboratively by Women in Technology awardees, The WICT Network and SCTE®, a CableLabs® subsidiary — seeks to educate and retain women who work in technology-related positions within the media and entertainment industry. The year-long program pairs senior-ranking women executives in the technology field with ambitious mid- and entry-level professionals. This event represents the end of the 2023-24 program. Attendance is invite-only.
9.24.2024	Wireless & Convergence  Everything You Ever Wanted to Know About Fixed Wireless Access (FWA) but Were Afraid to Ask!	12:30 PM - 1:45 PM EST		GS Sickand VP of Wireless Engineering Cox  Dr. Roy Sun Ph.D., Principal Architect CableLabs  Dorin Viorel Distinguished Technologist CableLabs	Experimental FWA MIMO Capacity Analysis in 6 and 37 GHz Bands  Determining the extent to which FTW can meet the ever-increasing demand for capacity Investigating the capacity enhancement potential of multiple-input-output (MIMO) systems  Lesson learned: key findings and potential implications for the cable industry Roy Sun Ph.D., Principal Architect CableLabs  Fixed Wireless Access Propagation Challenges  Evaluating the capability of FWA to deliver broadband wireless services effectively in terms of: network coverage performance economic viability Exploring radio propagation channels to enable measurement campaigns across various FWA scenarios Reviewing results and models to evaluate and optimize the performance and coverage of FWA networks Dorin Viorel Distinguished Technologist CableLabs
9.24.2024	Wireline Network Evolution  Your Network is Talking, Please Listen	12:30 PM - 1:45 PM EST		Brady Volpe CPO OpenVault  Larry Wolcott Comcast Fellow Comcast  Mr. Mike O'Dell Distinguished Engineer Comcast  Belal Hamzeh Vice President, Technology & System Engineering Comcast	Maximizing Upstream Spectral Efficiency: Bonding Groups That Make Sense  Maximizing the upstream received power spectral density by creating upstream bonding groups  Understanding how to correlate to the offered upstream service tiers and assign cable modem to an upstream bonding group that correlates to the customer's provisioned service tier  Analyzing the simulation and experimental results  Belal Hamzeh  Vice President   Technology & System Engineering  Comcast  The Proactive Network Maintenance (PNM) Comeback: OFDM and OFDMA Brings New, Laser-Guided Precision to Plant Fault Distancing  Deep dive analysis of actual plants: examining which conditions cannot

				evade high-resolution proactive network maintenance (PNM) Reviewing the entire process of collecting, decoding, and analyzing PNM data Developing a simplified approach to OFDM phase correction routine Lessons learned: tips and tricks emerging PNM technology Larry Wolcott Comcast Fellow Comcast Fellow Comcast  Qualifying Network Performance and Impairment Priority in Modern DOCSIS® Networks  Determining when an RF impairment in the network impacts the subscriber base  Using new technique for evaluating impairments to re-rationalize the network performance and so mobilize the workforce  Exploring new ways of describing the performance of the network using a single figure of merit  Diagnosing the operational health of the network to prioritize labor based on the level of impairment impacting the network at the service level Mike O'Dell Distinguished Engineer Comcast
9.24.2024	Operations, Construction & Network Planning Go with the Flow: Upstream	12:30 PM - 1:45 PM EST	Mike Darling Principal Network Engineer Rogers Communicatio ns  James Medlock Founder and CEO Akleza, Inc.  Jonathan Leech Principal Engineer II Comcast  Frank Wade Senior Manager, Technical Research and Development, Access Engineering Comcast - CONNECT	OFDMA in Action: Real-World Strategies for Hyper-Scaling Success  Reviewing the Impact of expanding OFDMA deployments  Exploring how OFDMA enablement and expansion across DOCSIS® 3.1 devices on HFC can improve upstream capacity  Embracing OFDMA to improve customer experience and paving the way for DOCSIS® 4.0 deployments  Lessons learned: Tools and processes leveraged, and improvements experienced  Frank Wade  Senior Manager, Technical Research and Development, Access Engineering  Comcast  Upstream Triggered Spectrum Capture:  Lessons Learned from Deployment at Scale  Examining the evolution of Upstream Triggered Spectrum Capture (UTSC) tools and exploring aspects of:  Fast Fourier Transform (FFT)  Strategies for signal/noise classification Forward Error Correction (FEC) rates Modulation Error Ratio (MER)  Heatmap displays  Exploring the possibility of using Artificial Intelligence (AI) and Machine Learning (ML), and correlation to Upstream Data Analyzer (UDA) events  Lessons learned: Insights and recommendations  Jonathan Leech  Principal Engineer II  Comcast  Smart Amplifier Ingress Noise Localization – An Integrated Solution  Leveraging PNM  Examining SCTE 279 as a standard for a new Smart Amplifier and SCTE 283 as an associated information model providing a number of monitoring and control functions  Leveraging the integration of PNM  Upstream Triggered Spectrum  Capture, HFC plant topology data, and existing standalone wink

					switches managed by an SCTE 283 compliant interface to localize ingress noise events Examining and meeting the challengeof implementing these solution when considering intermittent and short-lived noise bursts, HFC plant topology discovery, and the impact on cable modems related to available transmit headroom James Medlock Founder and CEO Akleza Inc.
9.24.2024	Al & Automation  Making the Most of Al in Broadband Networks	12:30 PM - 1:45 PM EST		Dr. Jennifer Andreoli-Fang Head of Fixed Networks AWS  Karthik Sundaresan Distinguished Technologist & Director of HFC solutions CableLabs  Marco Gagliostro Manager, PON Technology and Enterprise Network Operations Rogers Communicatio ns  Roy Pereira Assistant Vice President, Digital Service Cox Communicatio ns	A Telecommunication Engineer's Guide to Applied Artificial Intelligence  Developing an optimal strategy to deploy Al: What Al technologies are viable?  Identifying optimization opportunities and efficiencies whilst pinpointing potential roadblocks  Navigating the implementation process and ensuring you have the data needed for effective models and successful solutions  Roy Pereira  Application Development BSS   Digital Service  Cox Communications  A Beginner's Guide to Network    Automation for FTTH Networks  Getting back to basics: What cultural shifts are needed to build an organization and mindset that embraces automation?  Implementing best practices to kick-start your automation journey: Skills, collaboration, KPIs, training  Exploring tools, methodologies, architectures and functionalities to ensure a successful roadmap for network automation  Marco Gagliostro  Manager, PON Technology and Enterprise Network Operations  Rogers Communications  Edge Intelligence: Enabling Distributed ML Applications in Cable Networks  Understanding how to facilitate distributed edge intelligence on DOCSIS® network equipment, cable modems (CMs) and gateways  Exploring the potential of extending edge intelligent to other devices (distributed access architecture (DAA nodes or amplifiers)  Developing an architecture to support this deployment model  Implementing security mechanisms and APIs to enable functionality  Karthik Sundaresan  Distinguished Technologist & Director of HFC solutions  CableLabs  Moderator  Jennifer Andreoli-Fang  Senior Manager, North America Telecom, Service Providers Cloud Architecture
9.24.2024	The Human Factor  Driving Employee Performance: Exploring Training Impacts through	12:30 PM - 12:50 PM EST	The Loft	Abbie O'Dell Senior Director, Learning Services - Field Operations Charter Communicatio ns	Creating meaningful measures of the learning experiences that are critical to employee business success  Analyzing a performance dashboard that combines employee performance and training data  Determining whether the data provides the desired business impact to learning and operational leaders

	Business Metrics			
9.24.2024	Technology Policy  Spectrum Policy: (Re-)Shaping Network Technologies, A Demand-side Conversation	12:45 PM - 1:45 PM EST	Mark Walker VP, Technology Policy CableLabs  Flynn Rico-Johnson Policy Advisor, Wireless, Space, and International Federal Communicatio ns Commission  Monisha Ghosh Professor University of Notre Dame, Department of Electrical Engineering  Charles Cooper Associate Administrator, Office of Spectrum Management National Telecommunic ations and Information Administration	Spectrum is a key enabler of convergence and the vision of seamless, ubiquitous connectivity. Today and for the foreseeable future, Wi-Fi will remain the workhorse to provide connectivity to devices and applications in both homes and enterprises  The emergence of new and promising broadband technologies, such as LEO and 56/66 fixed wireless access, are similarly reliant on additional spectrum to provide increased performance  The panel of government and academic experts will explore how to avoid a zero-sum game and ensure spectrum access isn't the gatekeeper on developing new and innovative services
9.24.2024	Security & Privacy  We Are Not Immune from Attacks and Responsibility	12:50 PM - 1:45 PM EST	Brian Scriber Distinguished Technologist and VP of Security and Privacy Technologies CableLabs Shivam Gupta Security Engineer Cantata Health Solutions	Ransomware, Incident Reporting, and the Critical Infrastructure Designation for Cable Networks  Exploring the reality and addressing the expectations of having the designation of 'Critical Infrastructure'. What changes in government relationships can network operators expect over the next few years?  Operating in a shifting regulatory environment – how to best prioritize efforts?  Understanding and meeting the operational and reporting requirements related to technical and supply-chain threats.  Brian Scriber Distinguished Technologist and VP of Security and Privacy Technologies CableLabs  Safeguarding Machine Learning Systems: A Comprehensive Analysis of Security Concerns and Defensive Strategies  Examining the security concerns in machine learning – what are the associated threats?  Exploring and addressing potential vulnerabilities adversarial attacks model inversion attacks data poising attacks Understanding the importance of proactive security measures

9.24.2024	¿Pueden extenderse los beneficios de las arquitecturas distribuidas a los despliegues de pon? Un enfoque latinoamericano	1:45 PM - 2:05 PM EST	The Loft	Marcela Martinez Sr Engineer Access Network Planning Claro Colombia	robust model validation secure data handling protocols ongoing monitoring for anomalous behavior Developing future directives for enhancing security methodologies and approaches Shivam Gupta Network Specialist Media Communications Corporation  Casos de Uso de Remote OLT Ventajas y Desventajas de la arquitectura de Remote OLT Sinergias entre las redes de HFC y FTTx Please note this session will only be conducted in Spanish.
9.24.2024	Al & Automation  Generative Artificial Intelligence and Its Impact on the Cable Industry – Spanish	1:45 PM - 2:05 PM EST	The Loft	Dr. Claudio Righetti Director of the Artificial Intelligence Department Universidad Austral	Understanding the framework for GenAl and outlining its current scope and limitations  Exploring the applications determining the differences between systems based on GenAl and those using state-of-the-art traditional Al
9.24.2024	Technology Policy  National Spectrum Strategy Multistakeholder Process and Status	2:00 PM - 3:00 PM EST		Traci Biswese Vice President and Associate General Counsel NCTA – The Internet & Television Association	The National Spectrum Strategy seeks to repurpose and open over 2700 MHz of spectrum for commercial wireless use. The government's initial focus is on studying the potential repurposing of Lower 3 GHz and 7 GHz  National Telecommunications and Information Administration (NTIA) recently launched a multistakeholder process to implement the National Spectrum Strategy Implementation Plan Federal agency experts will explore the plan's key components, including timelines, responsible agencies, and stakeholder engagement regarding the Lower 3 GHz and 7 Ghz bands
9.24.2024	Wireless & Convergence  Track Keynote: Seamless Migration: A Case Study in Transferring the Wireless Customer	2:00 PM - 2:20 PM EST		Aamir Hussain SVP, Chief Technology and Product Officer Liberty Latin America	Examine the complex project of migrating 1.1 million wireless customers in Puerto Rico and the US Virgin Islands from another network to Liberty Latin America's subsidiary, Liberty Puerto Rico The challenges faced, such as building a new IT infrastructure, establishing a 5G network core, and coordinating the migration avoiding customer disruption Delve into the valuable lessons learned, including the importance of expertise, a comprehensive plan, and prioritizing both technical and operational requirements for a successful large-scale customer migration
9.24.2024	Network-as-a-Service API-Powered NaaS	2:00 PM - 3:15 PM EST		Israel Madiedo Innovation & Technology Director izzi (Televisa)	Towards a Federated Future: A Decentralized Framework for Global Developer Services  Adopting standardized APIs to empower developers to create and build new services  Understanding the benefits of a federated approach to developer registration, user authorization, and API access

			De Fu Li Distinguished Engineer Comcast  Christopher Aubut Principal Engineer II Charter Communicatio ns  Shafayet Khan Lead Software Engineer CableLabs	Developing strategies to monetize API interactions while maintaining ownership and control of exposed network resources  Advocating for the transformation of the delivery of developer services to foster innovation and a new approach to connectivity: What is the vision and how should the industry respond?  Christopher Aubut Principial Engineer II Charter Communications  vCMTS as a Service: Scalable and Extensible APIs  Exploring the role of CAMARA as an enabler for NaaS  Reducing operational complexity and engineering costs through cloud-native platforms  Utilizing APIs to reduce the barrier for onboarding and expanding engineering talent to accelerate innovation  De Fu Li Distinguished Engineer  Comcast  Quality by Design: Unveiling an Outcome-Focused Proof of Concept  Determining the advantages Quality by Design (QbD): A framework offering standardized APIs based on the Quality of Outcome (QoO) and Quality Attenuation (QED)  Equipping developers with insights and optimization tools for network adjustment through API-based automated workflows  Utilizing predictive outcome scores and detailed root cause analysis to gain insights and apply real-time information to address network impairments  Detailing steps to standardize Quality by Design APIs for industry-wide adoption  Shafayet Khan  Lead Software Engineer  CableLabs
				Moderator Israel Madiedo Innovation & Technology Director Izzi
9.24.2024	Operations, Construction & Network Planning  The What, Why and How of Using Digital Twins	2:00 PM - 3:15 PM EST	Greg White Distinguished Technologist CableLabs  Mehul Patel Distinguished Architect Comcast  Steve Condra Senior Engineering Director and Product Manager Teleste Intercept LLC  Matthew Palma Senior Director, Emerging Technology Platforms &	Access Network Node Augmentation Optimization through an Operational Digital Twin Model of Fiber Node Plant Topology  Applying digital twins to solve the problem of optimizing network capacity Examining how digital twin methodologies can inform crucial decisions to drive operational and cost efficiences in augmentation projects Utilizing software components and data models within the platform to mirror those deployed in the operational access network Capitalizing on the digital twin opportunity for cost savings by ensuring that the augmentation plans produce an optimized network with minimum investment and maximum compatibility with existing software platforms Mehul Patel Senior Principal Architect Comcast  Digital Network Twin: Setting a Foundation for Innovation  Exploring how Broadband Equipment Identity (BEID) is creating a

			Growth Charter Communicatio ns	standard to pave the way for enhanced digitization and innovation  Capturing real-time data to assist with the development of robust, future-proof networks  Developing an architecture for an intelligence platform which allows data collection process, solution deployment  Enabling future digital twin use cases through data foundations  Matthew Palma  Senior Director, Emerging Technology Platforms & Growth  Charter Communications  Evaluating Cable Network Inventory Methods: A Long-Term Scenario-Based Approach  Developing a scenario-based approach for evaluating three topology maintenance methods  Manual  Semi-automatic using wink switches  Advanced automatic network topology discovery.  Using scenarios to understand how to assess their long-term effectiveness, adaptability, sustainability, and cost-efficiency  Building a framework that enables informed decision-making in selecting a access network topology inventory maintenance strategy  Considering future readiness and cost implications  Steve Condra  Senior Engineering Director and Product Manager  Teleste Intercept LLC
9.24.2024	Wireline Network Evolution  Getting the Download on FDX	2:00 PM - 3:15 PM EST	Dan Rice VP, Access Network Engineering Comcast  Dr. Robert Howald Comcast Fellow Comcast  Dr. Richard Prodan Engineering Fellow Comcast  Marc Morrissette Sr. Principle Engineer, Access Networks Comcast	The First Anniversary of @Real10G – What Have We Learned?  Offering backwards, current, and forward-looking perspectives on the launch of the world's first DOCSIS® 4.0 services  Operationalizing the new technology and optimizing on the nature of innovation inherent in DOCSIS® 4.0 FDX  Lessons learned: The unique development, integration, and field challenges of the 2023 launch target and how to prepare for scalability in 2024  Robert Howlad  Comcast Fellow  Comcast Fellow  Comcast Fellow  Comcast Fox Amplifiers and Completing the Brilliant Network  Examining the capability of FDX-capable Smart Amplifiers to transform network operations and visibility  Deep dive on the essentials of FDX Smart Amplifiers including:  FDX-enabling technology  Cascaded performance  Capacity and traffic engineering Activation and alignment automation  The Amp software ecosystem  Network diagnosis and reliability  Lessons learned: the launch of DOCSIS® 3.1 in 2017, the future for DOCSIS®  Marc Morrissette  Senior Principle Engineer, Access Networks  Comcast  DOCSIS® 4.0 Profile Management Optimization — Moving Closer to Shannon Capacity  Exploring the potential of DOCSIS® 4.0 to

				optimize upstream capacity Tailoring solutions to the DOCSIS® protocol and the increase in available capacity achievable in currently deployed cable systems Reviewing the benefits of such an approach Richard Prodan Engineering Fellow Comcast  Moderator Dan Rice VP, CONNECT Technology Group Comcast
9.24.2024	Security & Privacy  Bad Things Happen with Bad Passwords	2:00 PM - 3:15 PM EST	Mr. Jacob Prosser Director, Cybersecurity Cox Communicatio ns  Dr. Golam Kayas Technical Research & Development Engineer Comcast  Serhad Doken Chief Technology Officer Adeia	How to Address Unauthorized Broadband Sharing  Examining the effectiveness of methods to detect if customers are engaging in broadband sharing  Developing a new approach that leverages radio frequency network (RF), artificial intelligence (AI) and machine learning (ML)  Understanding how to mitigate, discourage and prevent broadband sharing  Serhad Doken  Chief Technology Officer  Adeia  Customer Account Takeover Detection  Implementing measures to monitor for suspicious activity  How to identify suspicious activity by ingesting multiple signals  Exploring how pre-defined baselines and user behavior analysis can determine if a user's account is compromised.  Developing methods to respond to an account takeover  Jacob Prosser  Director of Cyber Defence  Cox Communications  Loose Bits Sink Gits: Unearthing  Repository Secrets and Scanning  Developer Trends  Determining the effectiveness of entropy calculation and regex-based (static) scanners vs. artificial intelligence-based alternatives for authentication  Assessing the extent to which AI-based solutions provide a higher accuracy structured secrets and unstructured secrets  Developing an understanding of how new repositories may have fewer secrets and its implications  Golam Kayas  Technical Research & Development Engineer  Comcast
9.24.2024	Al & Automation  Adopting an Al-Powered Approach to Network and Capacity Planning, Part One	2:00 PM - 3:15 PM	Yvette Kanouff Partner JC2 Ventures  Dr. Sebnem Ozer Distinguished Engineer Charter Communicatio ns  Mohsin Afridi Lead Communicatio ns / Network	Enabling GAN Based Model to Produce Strong Long-Range Forecast  Using Generative Adversarial Network (GAN) based models for accurate long-range forecasting: How does it compare to other models?  Quantifying the data needed to produce a robust forecast  Striking the right balance: Synthesizing an approach between GenAl and conventional methods  Mohsin Afridi Lead Communications / Network Engineer Cox Communications  Enhancing ISP Network and Service Optimization through Causal Inference and Knowledge Base Development

				Engineer	
				Cox Communicatio ns	Understanding the limitations of current AI techniques to define cause-effect relationships  Developing a two-step approach to pinpointing bottleneck links and identifying major causes within these links  Applying a reinforcement learning-based model that can iteratively learn from experiment results to refine actions in resolving bottleneck issues  Assessing the effectiveness of creating a simplified abstracted tandem model and exploring its limitations  Developing a framework to empower ISPs in optimizing latency and enhancing network performance  Sebnem Ozer  Distinguished Engineer  Charter Communications  Moderator  Yvette Kanouff  Partner  JC2 Ventures
9.24.2024	Wireless & Convergence  Boosting the Performance and Reliability of Wireless Networks	2:20 PM - 3:15 PM EST		Charles Cheevers CTO, Home Networks Vantiva  Dileep Kumar Soma Principal Wireless Engineer Charter Communicatio ns  Kamaljit Bal Wireless Private Network Architect Rogers Communicatio ns	Leveraging Public Networks to Compliment Delivery of High-Performance Private Networks  Developing a hybrid approach to combining public and private networks that drives flexibility, boosts performance, optimizes cost efficiency and offers strategic advantages  Understanding key considerations when implementing a hybrid strategy in terms of: application requirements traffic patterns security protocols compliance regulations partnerships and ecosystems Leveraging public networks to enhance private infrastructures' performance and resilience: Lessons learnt from use cases to date Kamaljit Bal Architect Rogers Communications Inc.  Unleashing Multi-Gigabit Homes  Assessing the viability of Wi-Fi 7 to meet the growing capacity demand of bandwidth-intensive applications Exploring the limitations in terms physical barriers and distance and determining the effectiveness of Wi-Fi 7 extenders Lessons learnt – how can we maximize the range of multi-gigabit coverage Dileep Kumar Soma Principle Wireless Engineer Charter Communications  Moderator Charles Cheevers CTO, Home Networks CommScope
9.24.2024	Wireline Network Evolution PNM Live!	3:15 PM - 3:55 PM EST	The Loft		The PNM Live! franchise continues with troubleshooting examples from the field. Come see how field technicians use Proactive Network Maintenance (PNM) to make it look easy, proactively finding and fixing problems before our customers are impacted. Our all-star panel of industry experts will provide insightful (and often entertaining) commentary.  Reviewing troubleshooting examples from

				field technicians Using Proactive Network Maintenance (PNM) to proactively find and fix problems before customers are impacted Lessons learned: Insights and guidance
9.24.2024	Technology Policy  Infrastructure Security: Integrating Zero Trust Across Core and Access Networks	3:15 PM - 4:15 PM EST	Jessica Almond Director, Technology Policy CableLabs	Adopting Zero Trust practices in both core and access networks provides long-term risk benefits as it shrinks perimeters, limits lateral movement to only authenticated and authorized services, and simplifies orchestration  CableLabs [and the cable broadband industry] will provide an overview of the recently released CableLabs' Zero Trust and Infrastructure Security (ØTIS) Best Common Practices (BCP) document for infrastructure elements  The BCP provides a consensus approach to the implementation of Zero Trust to ensure interoperable and reliable service delivery for operators. These common security practices embrace the Zero Trust concepts and help support convergence, automation and address evolving threats to network infrastructure Industry and government panelists will discuss the critical role of Zero Trust will support a more secure delivery of broadband services
9.24.2024	Wireline Network Evolution  Track Keynote: From the Cloud to the Home – a Smarter, Faster and Most Reliable Network Realized	3:30 PM - 4:00 PM EST	Elad Nafshi Executive Vice President, Chief Network Officer Comcast	To deliver the best-connected experiences to customers, today's networks need to be smarter, faster, more reliable and more resilient than ever  How Comcast has achieved true end-to-end transformation for a fully Al-enabled network that is redefining connectivity and with it customer expectations
9.24.2024	Network-as-a-Service  Containerization of the Cloud: Why, Where and How?	3:45 PM - 5:00 PM EST	Max Gasparroni VP Mobile Core – Mobile & Cloud Technology Liberty Global Technology Limited  Nasir Ansari Network Architect Rogers Communicatio ns  Pavan Chandrashek ar Lead Data Engineer Cox Communicatio ns	Containerization and Services Lifecycle Management: Are We There Yet?  Reviewing the effectiveness containerization and services lifecycle management models to accomplish the distribution of network functions to multiple physical locations  Examining current implementations using containers  Lessons learned: How can distribution of access Network Gateway Functions further improve service delivery, resilience, management and operations.  Nasir Ansari Network Architect Rogers Communications Inc.  Cloud-Native Approach to Automated Implementation of Network Strategy  Developing strategies to exploit the increasing functionality of cloud-based solutions  Integrating network models across your organization to create faster access to API development  Leveraging increased predictive capabilities with machine learning platforms  Examining strategies to deploy machine learning model at scale and explore

				further simplification through AI integration Pavan Chandrashekar Lead Data Engineer Cox Communications
9.24.2024	Adopting an Al-Powered Approach to Network and Capacity Planning, Part Two	3:45 PM - 5:00 PM EST	Yvette Kanouff Partner JC2 Ventures  Vaibhav Phatarpekar Senior Software Development Engineer Comcast  Jiten Patel Director Network Operations Altice USA  Judy Brown Network Engineer II Cox Communicatio ns	Technology-Agnostic Reliability for HFC and FTTH  Providers utilizing both fiber-to-the-home (FTTH) and hybrid fiber-coaxial (HFC) technologies results in a heightened demand for technology-agnostic data points for detecting reliability concerns  While each network can be monitored independently, there are shared data points that apply to both Explore how technology-agnostic data presents a practical solution for identifying network impairments within FTTH and HFC infrastructures  Jiten Patel Director Network Operations Altice USA  From Art to Science: Designing Resilient Topologies by Quantifying Network Performance Under Duress  Exploring different approaches to measure the resilience of logical topology designs  Understanding which metrics to prioritize and the benefits of using a resiliency score  Analyzing specific examples: greenfield deployments, managing uncertainty of shared risk link groups (SRLGs), and optimizing fiber additions/removals for existing physical topologies  Vaibhav Phatarpekar Senior Software Development Engineer Comcast  COX CPEONE Suite Now and in the Future!  Reviewing the effectiveness of CPEONE for managing the entire CPE lifecycle  Utilizing data mapped from installations, return, repair, scrap and to end of life  Developing and drilling into detailed performance metrics  Judy Brown  Network Engineer I  Cox Communications  Moderator  Yvette Kanouff Partner  JC2 Ventures
9.24.2024	Security & Privacy  Guarding the Gateway: Securing the Infrastructure	3:45 PM - 5:00 PM EST	Dr. Tao Wan Distinguished Technologist CableLabs  Matt Carothers Senior Principal Security Architect Cox Communicatio ns  Carl Klatsky Senior Principal Engineer Comcast	The Evolution of Domain Name System (DNS) Security and Privacy  Technical overview of oblivious DNS adoption and direction of DNS privacy services  Evaluating DNS strategies to minimize impact and disruption these services may cause to service providers' businesses and operations  Understanding recent standards for connecting clients with encrypted resolvers and what they mean to service providers  Reviewing best practices and recommendations for implementing DNS encryption to maximize subscribers' confidence in network-based DNS services  Jeff Van Dyke Chief Product Architect Akamai

			Jeff Van Dyke Chief Product Architect Akamai	Shielding Networks: Pioneering Defence Strategies Against Distributed Denial of Service (DDoS) Attacks  Extending the capabilities of Virtual Services Gateway (VSG) to provide a comprehensive distributed denial of service (DDoS) protection solution  Implementing a selective inline traffic inspection mechanism to detect & mitigate DDoS attack packets while bypassing legitimate traffic Determing the robustness of DDoS defense solution to secure access networks, ensure user experience and maintain customer trust Carl Klatsky Senior Principal Engineer Comcast  Stupid Log Tricks  Developing strategies to lower the costs of security information management Understanding how to manage multiple tools in real time Lesson learned: How to build a modern architecture using open-source components Matt Carothers Senior Principal Security Architect Cox Communications  Moderator Tao Wan Distinguished Technologist CableLabs
9.24.2024	Wireless & Convergence  Seamless Connectivity: Anytime, Anyplace, Anywhere	3:45 PM - 5:00 PM EST	Mr. Neel Dayal Senior Director, Innovation and Partnerships Rogers Communicatio ns  John Bahr Distinguished Technologist CableLabs  Sorna Dhanabalan Lead Architect Cox Communicatio ns  Thirumurthy Rajamanicka m Head of Broadband Devices Product Architecture Nokia	Cox's Next Generation Serviceability and Location Based Intelligence Systems  Designing a platform to provide seamless access and manage serviceability across multiple transports and technologies  Understanding how to apply location-based intelligence with standardized data to serve a wide range of products and services in multiple transports  Leveraging serviceability data to develop and promote products and services  Sorna Dhanabalan  Lead Architect  Cox Communications  Technical Paper on Creating Seamless  Connectivity — Transitioning  Between Wi-Fi and Other Radio  Access Networks  Exploring key considerations and overcoming challenges to achieving seamless connectivity  Enabling a unified user experience across diverse network environments to drive QoS and QoE  Analyzing the effectives of existing solutions and approaches for seamless connectivity in terms interoperability, standardization and collaboration  John Bahr  Distinguished Technologist  CableLabs  5G and Wi-Fi 7 Network Convergence with End-to-End Network Slicing  Understanding the role of the convergence of mobile 5G and Wi-Fi access in providing end-to-end network slicing solutions for management and service operations  What impact will Wi-Fi 7 technology have? Exploring the framework and architecture of the converged network and the

				associated technologies Reviewing end-to-end network slicing within a converged 5G and Wi-Fi access network – what are the network management requirements for different environments? What is the future evolution of convergence of 5G and Wi-Fi access? Thirumurthy Rajamanickam Head of Broadband Devices Product Architecture Nokia
9.24.2024	Operations, Construction & Network Planning  Powering a Greener Future	3:45 PM - 5:00 PM EST	Derek DiGiacomo Senior Director, Energy Management Program & Business Continuity SCTE  Toby Peck Senior Director of Broadband Product Management EnerSys Energy Systems  Mike Wojciechowsk i Engineer 3, Critical Infrastructure Comcast X-Labs  Ivan Perallon VP Access Power Systems Technetix	Sharpen Your Senses: Enabling the No-Touch HFC Power Network Through Next-Gen Instrumentation  Deploying an enhanced power sensing upgrade on new and legacy power architectures  Differentiating between power sources to improve outage deployment, improve reliability and reduce truck rolls  Understanding how to read transient signatures to train ML engines for future predictive algorithms and improve AI engine decision making Analyzing new insights being realized from enhanced sensory data Toby Peck Senior Director of Broadband Product Management EnerSys Energy  Reduce Network Power Consumption by Up to 30%  Reviewing drivers to reduce network power consumption Using direct current (DC) to improve efficiency by allowing a power factor of one and switching mode power supplies (SMPS) Understanding how different frequencies from DC can reduce a minimum electrolytic corrosive and optimize energy savings Ivan Perallon VP Access Power Systems Technetix, Inc.  Draining the Power Grid: Slaying Energy Vampires and Optimizing Your Cable Network's Power Consumption  Developing strategies to optimize power efficiency within the network with a focus on inside and outside plant powering Considering the options for reducing OSP energy waste within fiber optic nodes, OSP power supply right-sizing, and field equipment decommissioning Analyzing ISP wattage reduction practices, optimizing cooling techniques and standards to meet site needs Lessons learned: How to achieve significant energy savings and rebates while maintaining network performance Mike Wojciechowski Critical Infrastructure Design Engineer
9.24.2024	Wireline Network Evolution  A Report Card on Virtual CCAP and	4:00 PM - 5:15 PM EST	David Ririe Sr. Director, Access Engineering Cox Communicatio ns	Lessons Learned from the World's First Deployment of Dual Queue Low Latency Networking  Reviewing trial experiences for the world's first deployment of dual queue low latency networking Challenges faced and obstacles overcome Analyzing the measurement data concerning the improvements in latency

	Low Latency		Derek Lee Manager, Wireline Access Technology & Engineering Rogers Cablesystem  Jason Livingood Vice President - Technology Policy, Product & Standards Comcast	Jason Livingood Vice President   Technology Policy, Product & Standards Comcast  Latency Outcomes Across Access Architectures  Examining results from latency measurements across different technologies on production networks and the impact of enabling low-latency DOCSIS® (LLD) across different hybrid fiber coaxial (HFC) architectures.  Understanding the benefits of enabling active queue management (AQM) and aggregate service flows (ASF) Reviewing the results of tests on live cable plants compared to real world PON deployments utilizing the same tools and metrics  Developing an understanding of network latency measurements and the benefits of enabling technologies like LLD Eric Tijerina Director of Network Architecture and
9.24.2024	Ехро Нарру Ноиг			Access Engineering Midco  Dipping Your Toe in Virtual CCAP? Journey and Early Field Trials Lessons Learnt  Exploring the business drivers and architectural options from early field trials of virtual converged cable access platform (CCAP)  Comparing architectural options and weighing technical and commercial advantages against increased complexity and challenges Understand the challenges, lessons learned and key vendor-agnostic architectural decisions and impacts Derek Lee Manager, Wireline Access Technology & Engineering Rogers Cablesystem  Moderator David Ririe Cox  Cheers! Happy hour takes place in the
3.24.2024	Ехроттарру пош			exhibition after sessions end for the day. Throughout the exhibition attendees can mix and mingle with new and old connections. Happy hours are open to everyone and serve complimentary beer, wine and soft drinks.
9.24.2024	Chairmen's Reception	6:00 PM - 7:30 PM EST		The chairmen's reception is one of the most prestigious events for our VIP attendees. Taking place at the end of day one of the event at an exclusive off-site location, this is a chance for the most senior audience to mix and mingle.  By invitation only
9.24.2024	CEO Dinner	7:30 PM - 9:30 PM EST		Savor the best things in life: incredible food, inspiring conversations, and the joy of making connections.  By invitation only
9.25.2024	Network-as-a-Service  Architecting the Cloud: Orchestrating B2B, Multi-Cloud,	3:45 PM - 4:40 PM EST	Paul Fonte Director, Future Infrastructure Group CableLabs	Exploring the Indirect and Emerging Benefits of a Hybrid Multi-Cloud Strategy for MSOs  Determining the advantages and disadvantages of implementing a hybrid multi-cloud Enabling differentiated cloud services and features to create efficiency and

	and Applications		David Olea	innovation to satisfy
	and Applications		David Olea Senior Manager B2B Technology Liberty Latin America  Mr. Naim Ru Principal Architect Cox Communicatio ns	innovation to satisfy application-centric requirements  Integrating public cloud platform capabilities and architectural patterns into internally-managed private cloud and IT services to adopt best practices and design patterns  Defining the appropriate cloud strategy and guidelines for alignment across the business, application, data, and integration domains  data management governance technological capabilities mapping regulatory/security compliance considerations.  Naim Ru Principal Architect  Cox Communications  Automation and Orchestration of Multiple Platforms to Offer a B2B Self-Service Cloud Platform  Meeting customer needs by using automation tools in conjunction with other open-source platforms for DevOps  Understanding the benefits of a fully DevOps oriented environment in terms of meeting the laC (Infrastructure as Code) requirements, future-proof granting growth functionalities, adjusting to the new version and quickly adding features  Exploring how the architecture supports operating expense reductions, improves delivery time, enables new security features and offers opportunities to execute new customization based on market needs  What is the cultural change needed to succeed?  David Olea Senior Manager B2B Technology Liberty Latin America  Moderator Paul Fonte Director, Future Infrastructure Group
9.25.2024	Light Reading Breakfast: Betting on Mobility & Convergence	7:30 AM - 8:50 AM EST	Craig Leddy Contributing Analyst Heavy Reading  Victor Esposito SVP, Engineering and Network Operations Ritter Communicatio ns	Cable operators care about a lot more than their legacy HFC networks these days. Led by the four biggest U.S. MSOs and now the NCTC, cablecos are deploying mobile services throughout the land as they seek to develop a third prime offering to accompany broadband and video. Operators are also looking to weave in mobile so they can offer converged wireline-wireless services to customers over the same shared network infrastructure.  Where does the industry stand with its mobility campaign? How are cable and mobile technologists progressing with their convergence efforts? What will the uber network of the future look like? Which use cases seem the most promising? What are the biggest hurdles that technologists are encountering? How will they overcome them?
9.25.2024	Driving a Proactive Approach to Al-Powered Security	7:30 AM - 8:45 AM EST	Dawit Asfaha VP Strategy, Architecture & Integration Rogers Communicatio ns	Hacking the Hacker: How AI is Changing the Game of Penetration Testing  Determining the feasibility of utilizing large language models (LLMs) for penetration testing and ethical hacking  Exploring the art of the possible: How effective are LLMs in deciphering

			Dr. Kyle Haefner Ph.D., Principal Architect CableLabs  Jeff Calkins Lead Data Scientist Charter Communicatio ns	complex technical challenges, exploiting vulnerabilities and generating exploit scripts?  What are the ethical considerations for testing and guidelines for responsible implementation  Kyle Haefner Ph.D., Principal Architect CableLabs  Gremlins in the Network: How Adversarial Al Can Evade Network Detection  Understanding the role of network traffic analysis and adversarial Al in cybersecurity Deep dive: How can attackers manipulate network traffic data to bypass detection  Developing potential defense mechanisms to improve the robustness of network traffic analysis against adversarial Al  Kyle Haefner Ph.D., Principal Architect CableLabs  Protecting Content with Enhanced Gini Entropy Analysis  Developing a novel approach to security issues surrounding Digital Rights Management  Using anonymized data from peripheral devices and user behavior to draw inferences on user characteristics and system conditions  Jeff Calkins  Lead Data Scientist Charter Communications
9.25.2024	Operations, Construction & Network Planning  Using AI to Optimize Operations and Energy Consumption	7:30 AM - 8:45 AM EST	Ryan Capone Vice President, Network Facilities & Energy Comcast  Mike Glaser Principal Architect, Critical Facilities Cox Communicatio ns  Jordan Kupersmith Data Scientist II Cox Communicatio ns  Ron Slutter Advanced Application and Support Manager EnerSys Energy Systems	Preventing Network Maintenance Collisions, Using Artificial Intelligence (AI) Models for Predicting Collisions in Planned Maintenance Activities  Exploring how AI model use cases can predict and avoid collisions in change activities leading to customer impacts or extended outages during planned maintenance  Staying abreast of technological advances, break-fix scenarios and building new configurations in the network  Using a predictive AI model to aid engineers and technicians doing network maintenance to reduce customer impacts from planned maintenance Jordan Kupersmith Data Scientist II Cox Communications  Taking Critical Facility Energy Conservation Measures to the Next Level: Incorporating Lessons Learned and Moving Towards AI/ML for Building Management Systems Controls  Examining recent developments in Energy Conservation Measures (ECMs) to improve critical facilities availability, reliability, sustainability and resilience Reviewing ECMs and their impact and lessons learned through deployment  Exploring how AI and ML can be used with BMS controls to optimize efficiency Mike Glaser Principal Architect, Critical Facilities Cox Communications  Artificial Intelligence and the Nanogrid in Critical Facility Power Infrastructure

					Exploring the cost saving and sustainability benefits of nanogrids Using Artificial Intelligent Nanogrid controllers to predict and automate the energy decision-making process Selecting the appropriate source based on previously chosen criteria to optimize future changes manually Understanding the importance of Al for Critical Infrastructure Technologies to provide resilience, risk reduction, energy optimization, and sustainability through Nanogrid Critical Facility Power Infrastructure Ron Slutter Senior Technical Sales Representative EnerSys Energy Systems
9.25.2024	Wireline Network Evolution  Practical Strategies for Deploying FTTH	7:30 AM - 8:45 AM EST		John Bevilacqua Principal Architect CableLabs  Brian Yarbrough Principal Engineer - OSP Engineering Cox Communicatio ns  Kevin Noll Principal Architect CableLabs	The Path not Traveled – An analysis of modern PON technologies in the evolutionary path of HFC networks  Conducting a comparative analysis of 10G PON, 25G PON, 50G PON, and 100G Coherent PON technologies in terms of technical merits, deployment scenarios, and economic considerations  Analyzing various models of internet usage and how each technology can address escalating bandwidth requirements.  Developing a framework to select the most appropriate PON technology tailored to the specific needs of new deployments and the upgrade paths for existing networks  Kevin Noll Principal Architect CableLabs  FTTH Distance and Density Considerations  Understanding how the location of the deployment opportunity drives different optical transport considerations  Examining the scalability and economics of deploying targeted remote Optical Line Terminal (OLT) solutions vs. larger cabinet or facility-based decision tree can assist with network planning and estimating  Brian Yaprbrough  Principal Engineer – OSP Engineering Cox Communications  Moderator  John Bevilacqua  Principal Architect  CableLabs
9.25.2024	Circle of Eagles	7:30 AM - 8:45 AM EST	B301		The Circle of Eagles are valuable leaders of the Society, including Hall of Fame members, Charter Members, Fellow Members, Past Presidents and Chairmen of the Board.
9.25.2024	Opening Headliners	9:00 AM - 10:30 AM EST	Murphy Ballroom - Main Stage	Mark Bridges Senior Vice President and Chief Technology Officer CableLabs  Ronald Reuss Senior Vice President and	TechExpo headliner speakers are leaders setting the bold vision to shape the world of broadband connectivity and the workforce powering it.  CTO Town Hall  Charlie Herrin, President of the Technology, Product, Experience, Comcast  Len Barlik, Executive Vice President, Chief Technology Officer, Cox Communications  Justin Colwell, Executive Vice President, Connectivity Technology, Charter

9.25.2024	Exhibition Open	10:45 AM - 6:00 PM EST			evaluate key requirements relevant to the broadband industry and discuss the federal government's priorities
9.25.2024	A Year After the Artificial Intelligence Executive Order: Current Status & What's Ahead	10:45 AM - 11:45 AM EST	Direc	Shrinivasan tor, Technology Policy eLabs	The President's AI Executive Order outlined more than 150 directives that federal agencies must implement to ensure the United States remains at the forefront of responsible AI innovation and governance  A panel of government experts will
			Ray ( SVP,	Collins Infrastructure and Corporate Strategy ty Latin America	
				Ryan and Chief Strategy Officer ty Global	
			Exec	n Colwell utive Vice President, Connectivity Technology ter Communicatio ns	
			Cox	Barlik utive Vice President, Chief Technology Officer Communicatio ns	
			Presi	lie Herrin dent of the Technology, Product, Experience cast	Moderator: Ron Reuss, Senior Vice President and Chief Strategy Officer, CableLabs
			Senio	or Vice President, Wireline Networks	Damian Poltz, Senior Vice President, Wireline Networks, Rogers Communications  Jim Ryan, SVP and Chief Strategy Officer, Liberty Global  Ray Collins, SVP, Infrastructure and Corporate Strategy, Liberty Latin America
			Cable	eLabs an Poltz	Moderator: Mark Bridges, Senior Vice President and Chief Technology Officer, CableLabs Shaping the Future: Strategy Executive Perspectives
				Chief Strategy Officer	Communications

9.25.2024	SCTE Standards Business Continuity Program & Disaster Recovery Update	11:00 AM - 12:30 PM EST	B207	Derek DiGiacomo Senior Director, Energy Management Program & Business Continuity SCTE  Jim Shortal Assistant Vice President of Enterprise Business Continuity Cox Communicatio ns	Exploring the latest emergency response initiatives     Reviewing work with the Department of Homeland Security and business tools for continuity management     Lessons learned from case studies
9.25.2024	Wireline Network Evolution  From Residential to Multi-Service Fiber Access Networks	11:45 AM - 12:25 PM EST	The Loft	Ken Pyle  Douglas Blue Business Development Leader - North America, Fixed Networks Nokia  Ladi Astrab Head of Presales Incognito Software Solutions  Tom Williams CEO Razzle	Developing strategies to build fiber and/or DOCSIS® networks that serves the needs of residential, business, smart city, and converged mobile opportunities  Evaluating the access technologies and the value-added services that can be built across such networks
9.25.2024	Network-as-a-Service Optimizing Your Edge	12:30 PM - 1:45 PM EST		Bill Warga Vice President Strategy & Technology Liberty Global  Dr. Keith Rothschild Senior Principal Engineer Cox Communicatio ns  Nicholas Dunkin Director of Architecture and New Product Introduction Vecima Networks	Cox Engineering's Common Platform Strategy  Exploring how to deploy virtualized infrastructure and related automation systems to unlock innovation, efficiency, and reliability Driving key aspects such as development practices, automation, and centralized management to enhance operational efficiency  Utilizing carrier-grade solutions for cloud-native applications and essential network service to ensure scalability and reliability  Accelerating software development, deployment, and management while prioritizing security and efficiency  Keith Rothschild Senior Principal Engineer Cox Communications  The Multi-CDN Dilemma: Aggregated Edge Networks at Scale  Exploring the drivers for independent regional CSPs to consolidate behind a single global open caching request router  Propagating configurations to downstream caches and managing the delegation of streaming sessions  Aggregating reporting, logging, and

	I	1	I	1	
				Thomas Youngblood Systems Administration Manager Cox Communicatio ns	observability metrics for delivery to an upstream content provider Nicholas Dunkin Director of Architecture and New Product Introduction Vecima Networks  Designing a Cloud-Native, Real-Time Data Hub and Reporting Dashboard to support Cox Multi-Channel Contact Center Operations  Upgrading to a cloud-native design which enables the adoption of predictive technologies using AI and machine learning  Defining an architecture that will enable a data hub to allow consumption of multiple high-frequency and high-volume data sets with enrichment and data presentation in near real-time  Selecting the right set of services to meet business use cases without oversizing the design and delivering a cost-effective solution Thomas Youngblood Systems Administration Manager Cox Communications
9.25.2024	Growth & Transformation  Driving Growth with Business Services	12:30 PM - 1:30 PM EST		Brian Kaplan TMT Consulting Partner PWC  Satya Parimi Senior Vice President, Product & Strategy Spectrum Enterprise  Bob Victor SVP Customer Solutions Comcast Business  Michael Reinartz Director Innovation Vodafone Germany	How to pursue growth and margin enhancements with the enterprise customer and small-to-medium size businesses  Best practices for collaboration, differentiation, and innovation in business services
9.25.2024	Wireline Network Evolution  Navigating the Transition: Operational Insights into Delivering Broadband over Fiber	12:30 PM - 1:10 PM EST	The Loft		Exploring the operational journey undertaken by service providers transitioning to delivering broadband via Fiber to the Home (FTTH) networks  Lessons learned: Operational requirements, challenges encountered, and valuable insights gained along the way
9.25.2024	Wireline Network Evolution	12:30 PM - 1:45 PM EST		Fernando Villarruel Senior Advisor PON Core Group Ciena- Tibit Technologies	If You Love Coherent, Set it Free: Extending Coherent Optics to the Outside Plant  Unleashing the power of coherent optics in the outside plant (OSP) environment Examining the key technology

	Γ	·		
	A Photonic Future		Dr. Zhensheng Jia Fellow and Director of Advanced Optical Technologies CableLabs  Venk Mutalik Comcast Fellow Comcast  Tanuja Maneesh Senior Optical Transport Engineer Rogers Communicatio ns	innovations, contrast dual-laser and sub-carrier approaches Discussing the operational challenges and the architectures that help converge optical links from the core to the home Venk Mutalik Comcast Fellow Comcast  Our Ultimate Fiber Network Just Got a New Look with a Comb – A Comprehensive Exploration of Optical Frequency Combs  Introducing the concept of optical power generator and grid to optimize the use of optical resources Leveraging these comb sources over a single access network fiber Understanding the challenges and insights into potential solutions Assessing the architecture and migration strategies towards an ultimate cable fiber network Zhensheng Jia Fellow and Director of Advanced Optical Technologies CableLabs  Tactics for Deploying C-L CDC-F DWDM Systems  Launching high-performing optical transport technology without disrupting the customer Exploring best practices to overcome fiber non-linearities, such as Simulated Raman Scattering (SRS) and Amplified Spontaneous Emission (ASE) line-loading and minimizing network fragmentation. Understanding the technical and economic implications of deploying and operationalizing long-haul C-L CDC-F DWDM technology Developing a roadmap that can adapt to the dynamic landscape of wireline and wireless network evolution and the strategic deployment of advanced DWDM Tanuja Maneesh Senior Optical Transport Engineer Rogers Communications
9.25.2024	Operations, Construction & Network Planning  Optimation: Optimizing Operations with Automation	12:30 PM - 1:45 PM EST	Robert Gaydos Comcast Fellow Comcast  Douglas Johnson VP, Software Architecture Vecima Networks  Mark Kayser Sr Communications / Network Engineer, Cox Business Network Sustaining Engineering Cox Communicatio ns	The Journey of a LATAM Telco to Enhance Operations through AlOps  Determining the drivers for and meeting the challenge of implementing Artificial Intelligence for IT Operations (AlOps) Integrating AlOps across different such as: systems integration, information standardization, process optimization  Developing effective monitoring and incident management capabilities whilst prioritizing the user experience  Adopting AlOps to unlock new levels of operational efficiency and innovation  Carlos Reyes  Manager OSS Engineering and Automation  Liberty Latin America  Automation in a Service Provider Brownfield Network  Examining the components needed to create a complete automation solution  network planning tool automated configuration deployment

			Carlos Alberto Reyes Manager Service Assurance Development Liberty Latin America	network status tool configuration compliance solution Building a complete automation solution from both open-source solutions and homegrown tools to provide flexibility and customization in both greenfield and legacy networks Mark Kayser IP Engineer III, Cox Business Network Sustaining Engineering Cox Communications  Automating R-PHY in the Transition to vCMTS  Examining key concepts in R-PHY automation across the full network device lifecycle for vCMTS and RPD  Integrating CCAP to vCMTS with an API-first approach and applying lessons learned from existing national R-PHY automation to move to a full no-touch deployment model  Provisioning ongoing configuration management in a unified model with special consideration for complex automation concerns of gating, approval processes, and reconciliation loops Douglas Johnson VP, Software Architect Vecima Networks  Moderator Bob Gaydos Comcast
9.25.2024	Boosting Your Wi-Fi: Creating a Better Experience for Real-Time Applications	12:30 PM - 1:45 PM EST	Lili Hervieu Principal Architect, Wireless Research & Development CableLabs  Lei Zhou Engineer Charter Communicatio ns  Pratyusha Malladi Principal Engineer Charter Communicatio ns  Saju Palayur Senior Technical Director of Software Engineering Maxlinear Inc.	Strategies for Ultra-Low Latency in Wi-Fi Exploring new metrics to evaluate network performance: Why throughput and latency are key Analyzing mechanisms in Wi-Fi such as Multi-Link Operation (MLO) for managing and minimizing latency Leveraging new features and functions to extend low latency to the customer connecting via Wi-Fi Pratyusha Malladi Principle Engineer Charter Communications  QoS – It's Not Just for DOCSIS® Anymore – Quality of Service (QoS) Mechanisms in Wi-Fi  Understanding the limitations of current contention-based QoS mechanisms and their use in increasingly congested networks Considering other forms of network access that rely on central scheduling Exploring and comparing emerging QoS mechanisms to future proof Wi-Fi Saju Palayur Senior Technical Director of Software Engineering MaxLinear, Inc.  Wi-Fi Latency Characterization and Optimization  Exploring strategies to improve the latency performance of a WiFi network Evaluating the active queue management (AQM) technology as a solution to the buffer-bloat in a Wi-Fi link Optimizing AQM algorithms for contention-based media access systems by exploiting state information of the Distributed Coordination Function (DCF) of the Wi-Fi MAC Lei Zhou Engineer Charter Communications

9.25.2024	SCTE Energy 20/20 Update	1:00 PM - 2:30 PM EST	B207	Derek DiGiacomo Senior Director, Energy Management Program & Business Continuity SCTE	Reviewing the latest developments in sustainability and energy efforts Driving efficiencies in operations and engineering to support sustainability initiatives and the bottom line Now more than ever, the Energy 20/20 Program reminds us how important efficiencies in operations and engineering are to the planet and to our bottom line
				Ryan Capone Vice President, Network Facilities & Energy Comcast	
9.25.2024	Cybersecurity 2025: What Should We Expect?	1:15 PM - 2:15 PM EST		Loretta Polk Vice President and Deputy General Counsel NCTA – The Internet & Television Association	Cybersecurity is a never-ending hot topic both in government and industry, with a sharp focus by the current White House  Hear from government experts on the Administration's priorities and expectations for the broadband industry in this always evolving landscape
9.25.2024	Al & Automation  Developing and Building Al and GenAl Products	2:00 PM - 3:15 PM EST		Bill Warga Vice President Strategy & Technology Liberty Global  Dr. Jennifer Andreoli-Fang Head of Fixed Networks AWS  Jan Neumann Vice President, AI Technologies Comcast  Jim Prather Lead Systems Engineer Cox Communicatio ns	Causality-Based Instant Root Cause Analysis for Microservices Failure  Automating the construction of micro-service dependencies by leveraging causal discovery techniques with multivariate time-series data to facilitate the swift identification of microservice failures  Empowering site reliability engineers to make informed, data-driven decisions  Understanding how to implement a causality-based instant RCA method in an AlOps platform to improve reliability  Jan Neumann Senior Director, Applied Al Research Comcast  Anomaly Detection in the Oracle Database Ecosystem Using Density Based Spatial Clustering (DBSCAN) for anomaly detection Operationalizing DBSCAN ML techniques on database monitoring data Understanding how to manage and group your data across databases using standard monitoring techniques Jim Prather Lead Systems Engineer Cox Communications  A Comprehensive Approach to Building Generative Al Products  A framework for understanding, evaluating, and integrating Al and GenAl into various software development operations and services  Exploring the different classes of GenAl models, including open-source, open-weights, and proprietary models to enable effective utilization  Synergies between GenAl and other Al technologies to unlock new possibilities for operations, network management, content analysis and generation, and enhancing the customer experience

9.25.2024	Growth & Transformation – Lessons from the Video Game Industry	2:00 PM - 3:00 PM EST	Anju Ahuja VP Product Strategy Insights CableLabs  Shawn Layden Former Chairman PlayStation Worldwide Studios Sony Interactive Entertainment	Jennifer Andreoli-Fang Senior Manager, North America Telecom, Service Providers Cloud Architecture Amazon  Moderator Bill Warga Vice President Strategy & Technology Liberty Global  The video game industry achieved record growth, outpacing movie and music combined Shawn Layden, former Chair of PlayStation Worldwide studios shares the secret to their growth, innovation and differentiation Hear the implications and opportunities for broadband operators in this fireside chat with Anju Ahuja
9.25.2024	Wireline Network Evolution  Coherent PON	2:00 PM - 2:55 PM EST	Matt Schmitt Principal Architect CableLabs  Edward Boyd Vice President, PON R&D Ciena  Dr. Haipeng Zhang Principal Architect CableLabs	What Could You Do with 100 Gbps Coherent PON?  Analyzing the viability of a specific coherent PON as a replacement for point-to-point fiber solution used in backhaul, enterprise connectivity, and aggregation Lessons learned: Reviewing the cost, optical budget, system throughput, latency, jitter, and the applicability Edward Boyd Vice President   PON R&D Ciena  Unleashing the Power of Coherent Optical Technology: Revolutionizing Next-Generation PONs with Flexible Rates, Upstream Burst Detection, and Network Protection  Exploring how CPON architecture can replace External Cavity Lasers (ECLs) with affordable devices in the ONUs and versatile bandwidth allocation across time and frequency domains  Examining the field of upstream burst coherent detection in CPON and the significance of efficient burst recovery and processing Reviewing network reliability and resiliency in an innovative network protection strategy for CPON that leverages a cost-effective mutual protection scheme  Haipeng Zhang Principal Architect CableLabs  Moderator Matt Schmitt Principal Architect CableLabs
9.25.2024	Wireless & Convergence  DOCSIS® Meets Wireless: Performance Analysis and Testing	2:00 PM - 3:15 PM EST	Josh Redmore Principal Architect, Wireless Access Technologies CableLabs  Dr. Rahil Gandotra Lead Architect	Transport Protocols Analysis  Exploring the QoS and QoE requirements of new and emerging demanding applications  Understanding the increasing importance of the transport and network layers working in synergy on overall network performance  Reviewing the capabilities available and the results from both simulations and real-world traffic testing  Lessons learned: Determining the use cases and applicability of each

				CableLabs	protocol and deployment options Rahil Gandotra Lead Architect CableLabs
				David Urban Independent	Wi-Fi 7 Meets World Subtitle: Utilizing 802.11be Features to Increase Customer Application Reliability
				Victor Lopez Network Engineer Charter Communicatio ns	Exploring the ability of Wi-Fi 7 to deliver the capacity and improve the reliability of the connection needed for emerging customer applications. How can the tools and features of Wi-Fi 7 be deployed to meet customer reliability requirements?  David Urban Independent
					Wi-Fi Performance Testing for Outdoor Environments
					Developing strategies to conduct Wi-Fi testing in diverse markets for out-of-home environments Understanding the methodology for testing and characterizing the Wi-Fi environment Victor Lopez Network Engineer Charter Communications
9.25.2024	Operations, Construction & Network Planning	2:00 PM - 2:20 PM EST	The Loft	Chuck Page VP, Technical Operations Liberty Caribbean	Examining the benefits of a copper access network with FTTH  Making a CapEx investment to overbuild a copper access network with fiber Migrating OpEx savings from copper network shutdown  Chuck Page
	Transforming a BSP from VDSL to GPON: A Case Study on the Operational Benefits of Overbuilding a Telco's MSAN				VP, Technical Operations Liberty Caribbean
9.25.2024	Operations, Construction & Network Planning	2:20 PM - 3:35 PM EST		Jennifer Smardo Senior Vice President, Network	Building and Deploying Enterprise-Wide Design and Drafting Tools for Hybrid Fiber Coaxial (HFC) Networks
	New Approaches to Network Design			Implementatio n Comcast	Reviewing the development of a HFC network design tool that addresses the limitations of existing tools  Meeting the challenges of transforming data from current tools  Examining strategies for deployment strategy for the HFC network design tool
				Sung-eun Kim Principal Architect Cox Communicatio ns	Understanding the considerations for regional rollout to reduce risk and embrace adoption  Determining the challenges of deploying an application that provides data to over one hundred applications using layer services  Kathy Binns  Program Delivery Director  Comcast
				John Schlack Distinguished Architect Comcast Cable	Taking the Guesswork Out of Network Capacity Management  Analyzing network performance metrics aimed at facilitating robust capacity management strategies within broadband networks
				Kathy Binns Program Delivery Director	Assessing potential applications for effective network capacity management Leveraging insights derived from speed distributions, latency characteristics, and associated parameters to proactively optimize

				Comcast	network resources, enhance service quality, and ensure optimal customer experience Sung-eun Kim Senior Network Planning Engineer Cox Communications  Evolution of the Automated Pre-Vetting Process to Validate Access Network Maps  John Schlack Distinguished Architect Comcast  Moderator Jennifer Smardo Senior Vice President, Network Implementation Comcast
9.25.2024	The Human Factor  Al Strategy Arena:  Master the Game of Integration	2:30 PM - 4:00 PM EST	B302		Exploring innovative strategies to overcome real-world challenges associated with AI deployment Building a clearer understanding of the steps involved in AI integration, from conceptualization to execution
9.25.2024	Technology Policy  Where in the World are Broadband Programs Now?	2:30 PM - 3:30 PM EST		Pamela Arluk Vice President & Associate General Counsel NCTA - The Internet and Television Association  Adam Cassady Media and Wireline Advisor to Commissioner Nathan Simington Federal Communicatio ns Commissioner Simington  Amanda Martin Policy Director National Telecommunic ations and Information Administration	States are starting to receive BEAD funding, the Affordable Connectivity Program remains unfunded (or received new funding), states and operators continue programs to build workforce, digital skills, and increase digital equity With all of these programs running at the same time, where are we going and what are the challenges?
9.25.2024	The Human Factor Lightning Talks: Innovation in Action	2:30 PM - 3:25 PM EST	The Loft	Bill Warga Vice President Strategy & Technology Liberty Global	Discover industry case studies demonstrating how creative confidence and innovation grit can push boundaries Understand how to persevere when faced with challenges and obstacles, making bold decisions despite prior failures Learn how to face uncertainty, handle naysayers, and advance innovative

				Phil McKinney CEO CableLabs  Michelle Vendelin Director, Innovation Services & Coaching CableLabs	work over the long-haul Build your career currency and pursue your ideas
9.25.2024	Technology Policy  Where in the World are Broadband  Programs Now?	2:30 PM - 3:30 PM EST	B405	Pamela Arluk Vice President & Associate General Counsel NCTA - The Internet and Television Association	States are starting to receive BEAD funding, the Affordable Connectivity Program remains unfunded (or received new funding), states and operators continue programs to build workforce, digital skills, and increase digital equity With all of these programs running at the same time, where are we going and what are the challenges?
				Adam Cassady Media and Wireline Advisor to Commissioner Nathan Simington Federal Communicatio ns Commission, Office of Commissioner Simington	
				Amanda Martin Policy Director National Telecommunic ations and Information Administration	
9.25.2024	Building a Services-Platform Beyond Simple Connectivity	3:30 PM - 4:10 PM EST	The Loft		Exploring different architectures and services platform Driving value and differentiation from within the managed home to new containerized service offerings and relevant Quality of Experience (QoE)
9.25.2024	Growth & Transformation  CMO Insights: The North American Perspective	3:30 PM - 4:30 PM EST	B312	Wendy Rosen AVP Consumer Insights Cox Communicatio ns  Kendall Milne Bancroft SVP Rogers Communicatio ns	How the industry has developed and meeting the demands of new users Building marketing strategies that suit a changing audience

				David McNaughton Senior Vice	
				President Sales and Marketing Mediacom	
				Todd Arata Senior Vice President, Brand and Integrated Marketing Communicatio ns Comcast  Sharon Peters Executive Vice President, Chief	
				Marketing Officer Charter Communicatio ns	
				Kate Slyker Chief Marketing Officer GCI	
9.25.2024	Network-as-a-Service  Architecting the Cloud: Orchestrating B2B, Multi-Cloud, and Applications	3:45 PM - 4:40 PM EST	B314	Paul Fonte Director, Future Infrastructure Group CableLabs	Exploring the Indirect and Emerging Benefits of a Hybrid Multi-Cloud Strategy for MSOs  Determining the advantages and disadvantages of implementing a hybrid multi-cloud Enabling differentiated cloud services and features to create efficiency and innovation to satisfy
	and Applications			David Olea Senior Manager B2B Technology Liberty Latin America	application-centric requirements Integrating public cloud platform capabilities and architectural patterns into internally-managed private cloud and IT services to adopt best practices and design patterns Defining the appropriate cloud strategy and guidelines for alignment across the business, application, data, and integration domains data management
				Mr. Naim Ru Principal Architect Cox Communicatio ns	governance technological capabilities mapping regulatory/security compliance considerations. Naim Ru Principal Architect Cox Communications
					Automation and Orchestration of Multiple Platforms to Offer a B2B Self-Service Cloud Platform
					Meeting customer needs by using automation tools in conjunction with other open-source platforms for DevOps Understanding the benefits of a fully DevOps oriented environment in terms of meeting the IaC (Infrastructure as Code) requirements, future-proof granting

					growth functionalities, adjusting to the new version and quickly adding features  Exploring how the architecture supports operating expense reductions, improves delivery time, enables new security features and offers opportunities to execute new customization based on market needs  What is the cultural change needed to succeed?  David Olea Senior Manager B2B Technology Liberty Latin America  Moderator Paul Fonte Director, Future Infrastructure Group CableLabs
9.25.2024	Operations, Construction & Network Planning  Making Sense of Plant Data	3:45 PM - 5:00 PM EST	B313	Dr. Jason Rupe Distinguished Technologist CableLabs  John Chrostowski Executive Director, NGAN Access Engineering Comcast  Allen Maharaj Manager - HFC Network Operations Rogers Communicatio ns  Anna Gallegos Technical Product Manager Comcast	Re-Thinking Service Interruptions from Architecture to Operations  Building a centralized and automated solution to identify all interruptions and assign a potential root cause in near real-time by leveraging network telemetry Integrating a novel algorithm into the existing network ecosystem that can differentiate between various types of plant events and commercial power outages (CPO)  Use case analysis: How is the algorithm being used to identify root cause with the presence of alternative power sources?  Exploring how automated root cause identification enables a more efficient path to remediation resulting in a better operational and customer experience  Anna Gallegos Technical Product Manager  Comcast  Hattery Will Get You Everywhere  Building tools and processes for successful deployment of DOCSIS® 4.0 FDX at scale Examining the effectiveness of the automated assessment tools designed, built, and implemented to date in terms of customer experience, scalability and DOCSIS® 4.0 migration  Lessons learned and metrics from the FDX installations  Explain the roadmap for these tools as FDX evolves to deploy over N+x systems  John Chrostowski Executive Director, NGAN Access Engineering  Comcast  Understanding the Challenges of DOCSIS® Proactive Network Maintenance  Determining and overcoming the obstacles that can undermine the success of DOCSIS® Proactive Network Maintenance (PNM) initiatives  Deep dive into data overload: How to distill complex data into clear, actionable recommendations for network maintenance and optimization  Optimizing PNM programs to unlock the full potential of proactive network maintenance in delivering superior service quality to subscribers  Allen Maharaj Manager, HFC Operations Rogers Communications Inc.  Moderator

					Jason Rupe Distinguished Technologist CableLabs
9.25.2024	Wireless & Convergence  Connectivity for the Enterprise Customer	3:45 PM - 5:00 PM EST	B308	Dr. Rikin Thakker Chief Technology Officer and SVP, Technology NCTA - The Internet & Television Association  Mr. Robert Jaksa Principal Engineer Comcast  Rohith Kumar Punithavel Sr. Software Engineer Charter Communicatio ns  Jeff Hales Principal Architect Cox Communicatio ns	Challenges and Potential Solutions to Deploying IoT (Internet of Things) in a Multi-Dwelling Setting  Developments in advanced automation and integrated services: What are the available service offerings and meeting their connectivity requirements  Exploring the associated challenges and various solutions to deploying Internet of Things (IoT) services in multi-dwelling properties  Assessing the pros and cons of available solutions  Jeff Hales Principal Architect Cox Communications  Comcast Business Powers Next-Gen Connectivity at The Players Championship  Private Wireless 5G network case study: A behind-the-scenes look at the 2024 PLAYERS® Championship  Exploring the power of CBRS spectrum and leveraging PAL and GAA spectrum  Examining developments in RF planning and design approaches  Identifying the broader application of private wireless use cases across industry verticals as defined by enterprise customers requirements  Robert Jaksa Principal Engineer Comcast  Connectivity in Electric Vehicles: A Practical Case Study  Exploring the criticality of connectivity in electric vehicles: What is needed in practical terms  Understanding the data usage for upload and download per day, month, vehicle, and manufacturer  Forecasting EV sales and Charter network's capability to handle data transactions  Rohith Kumar Punithavel Senior Software Engineer Charter Communications  Moderator  Rikin Thakker Chief Technology Officer and Senior Vice President  NCTA
9.25.2024	Technology Policy  Broadband Networks and Disaster Planning	3:45 PM - 4:45 PM EST	B405	Derek DiGiacomo Senior Director, Energy Management Program & Business Continuity SCTE  Jim Shortal Assistant Vice President of Enterprise Business Continuity Cox Communicatio	In today's interconnected world, reliable communication platforms are the backbone of society Simultaneously, the world is witnessing a rise in severe weather events and natural disasters due to climate change Operators and government agencies are striving to minimize risks and expedite recovery times in the event of these natural disasters Hear how broadband providers and local, state, and federal agencies are working hand in hand to prepare for and respond to these challenges

				ns	
9.25.2024	Wireline Network Evolution  HFC Continues to Deliver	3:45 PM - 5:00 PM EST	B401	Dr. Alberto Campos Fellow CableLabs  Mike Cooper Principal Architect Cox Communicatio ns  Dr. Rob Thompson System Architect Sercomm Technology Inc.	Real World HFC Plant Migration to 1.8 GHz  Examining developments in HFC architectures encompassing nodes with amplifier cascade depths of 5 amplifiers higher  Developing detailed models to aid in predicting performance within these cascades  Exploring the results from field testing conducted with DOCSIS® 4.0 downstream RF signals between 804 and 1764  Mike Cooper Principal Architect Cox Communications  HFC -The Gift That Keeps On Giving?  Determining the extent to which the hybrid fiber-coax (HFC) platform can still address future services and demands  Assessing HFC evolution opportunities, meeting the challenges and developing tools and methodologies in a practical and cost-effective manner  Reducing implementation costs of fiber deeper and N+0 topologies while simplifying operations  Understanding the architectural implications including the hybrid success-based FTTH-HFC evolution strategy  Alberto Campos Fellow  CableLabs  Harmonizing FDX and FDD to Minimize ACI Impacts in 10G Networks  Examining the standards-based features necessary to minimize the increasing impact of adjacent channel interference (ACI) for the future 10G networks  Reviewing current ACI research and adding new data to provide a comprehensive overview of ACI as it applies to both frequency division duplex (FDD) and full duplex DOCSIS® (FDX) networks  Offering recommendations for the minimization of ACI in the future 10G networks with a focus on FDD access networks  Rob Thompson System Architect Sercomm Technology Inc.
9.25.2024	Al & Automation  Finding the Al Advantage in Customer Experience	3:45 PM - 5:00 PM EST	B407	Asit Tandon Vice President, Network Technology Rogers Communicatio ns  Ilana Weinstein Data Scientist Comcast  Gavin Mitchell VP Product Quality Assurance Altice USA	Reducing Preventable Service Visits with Generative AI: Altice and Palantir  Using AI, ML and data modelling to drive a data-driven approach to site visits  Unlocking new ways of closing feedback cycles faster and more efficiently  Lessons learned: Evaluating troubleshooting tools in real time, responding to changes in a more agile way  Gavin Mitchell VP Product Quality Assurance  Altice USA  Causality for Customer Experience Anomalies with Real-Time vCMTS  Telemetry and Machine Learning  Utilizing machine learning techniques for root cause analysis  Developing techniques to pinpoint the root cause behind anomalies detected  Determining the extent to which automation can eliminate network monitoring boundaries beyond

				Juan David Rodriguez Lamus Director Business Analytics Liberty Latin America	software upgrades Examining the future potential of ML to run in real time and integrate with existing monitoring tools at scale llana Weinstein Data Scientist Comcast  Customer Experience-Centric Network Investment and Interventions Through Al  Implementing an Al-driven approach to prioritize a shift towards a more customer-centric network management strategy Moving beyond traditional KPIs allowing for strategic network intervention prioritization to reduce customer interactions and chum  Using Al classification models for HFC and FTTH networks to predict which customers are likely to seek technical support  Creating a blueprint for telcos to ensure investment strategies and network upgrades are directly aligned with improving the customer experience Juan Rodriguez Al and Advanced Analytics Sr. Director Liberty Latin America  Moderator Asit Tandon Vice President, Network Technology Rogers Communications
9.25.2024	Wireless & Convergence  Spectrum Utilization: Nationwide Measurements for New Spectrum Opportunities and Government Policy	4:40 PM - 5:00 PM EST	The Loft	Mark Poletti Director Mobile Networks and Principal Architect CableLabs	Exploring the design of the spectrum monitoring kit, data analytics algorithm, and results of the CableLabs nationwide campaign Using findings from the initiative to assess the need for and the value of the spectrum within their markets Refining wireless business case assumptions, developing spectrum advocacy strategies, and exploring technical solutions for expanding wireless services Mark Poletti Director Mobile Networks and Principle Architect CableLabs
9.25.2024	Expo Happy Hour	5:00 PM - 6:00 PM EST	Exhibition Halls B1 - B3		Cheers! Happy hour takes place in the exhibition after sessions end for the day. Throughout the exhibition attendees can mix and mingle with new and old connections. Happy hours are open to everyone and serve complimentary beer, wine and soft drinks.
9.26.2024	International Cable-Tec Games Registration & Breakfast	8:00 AM - 9:00 AM EST			
9.26.2024	Exhibition Open	9:00 AM - 1:00 PM EST	Exhibition Halls B1 - B3		
9.26.2024	SCTE International Cable-Tec Games	9:00 AM - 12:45 PM EST			International SCTE Cable-Tec Games is where the best cable technicians from around the world come to compete and showcase their skills. The year's winners from local cable games, typically held at chapter vendor shows or regional cable shows, will vie for the international gold, silver, and bronze awards.

9.26.2024	AI & Automation	9:30 AM - 10:45 AM EST		Sanket Walavalkar Vice President	Automating Amplifier Analysis with PNM Full Band Capture, RxMER, for Activation of a Second OFDM
	Al-Driven Insights for Outside Plant and			Comcast	Channel  Understanding the operational challenges
	Customer Premises			Matt Wichman Dir Network Ops Comcast	of deploying additional downstream channels Assessing the impact of total composite power on amplifier performance and linear operation, overall system performance and achievable capacity
				Dr. Maher Harb Distinguished Engineer Comcast	Reviewing the fundamental theory behind the phenomenon alongside examples obtained from lab measurements Introducing a method for detecting amplifier nonlinearity based on measuring the distortion noise from a cable modem's full band capture
				Dr. Vikram Karwal Senior Data Scientist Rogers Communicatio	(FBC) Performing data analysis across the entire vCMTS footprint to inform deployment priority Developing a statistical model for the prediction of amplifier non-linearity Maher Harb Distinguished Engineer Comcast
				ns	You Might Have a Screw Loose: Remote Detection of Thermal Imperfections
					Developing robust monitoring systems to detect thermal problems through a range of operating temperatures Using multiple sensors to remotely detect the thermal health of node and identify fixable problems before they impact performance Combining field studies and real-world trials together to turn remote sensor readings into actionable network intelligence Matt Wichman Director Network Operations Comcast
					Proactive Network Maintenance for Customer Premise Issues in DOCSIS® Network
					Developing a framework for efficient implementation of proactive network maintenance (PNM) when DOCSIS® 4.0 is implemented at scale  Utilizing advanced predictive frameworks and deep learning models to enable timely identification and resolution of customer premise issues in DOCSIS® networks  Leveraging data from a variety of sources to create holistic insights and address potential faults before they impact service quality  Vikram Karwal Senior Data Scientist Rogers Communications
9.26.2024	AI & Automation	9:30 AM - 10:45 AM EST	B308	Jan Neumann Vice President, Al	The Conversational Network: Al-Powered Language Models for Smarter Cable Operations
	Introducing RAG: How Can Retrieval	LOI		Technologies Comcast	How can GenAl help operators and vendors all be more efficient and effective
	Augmented Generation Fine-Tune your LLM			Tyler Glenn Principal Engineer CableLabs	Exploring the potential of GenAl and LLMs to solve operational challenges: Assisting technicians and engineers Improving on the job training Writing technical documents, standards, and specifications Lesson learned: Challenges, tactics, tools, information sharing and innovation.
				Dr. Santhana Chari VP, Broadband Analytics and	Tyler Glenn Principal Engineer CableLabs Supercharging Proactive Network

				D 1 C 1	Maintenance by Laverning
				Data Science OpenVault	Maintenance by Leveraging Generative AI and ML
				Mr. David Suh Lead Software Engineer Cox Communicatio ns	Obtaining insights to develop tools and best practices for deploying Al/ML for DOCSIS® technologies Developing methods to to fine-tune and refine the performance of LLMs on domain-specific data: Retrieval Augmented Generation (RAG) and low rank adaption (LoRA) Building tools and sharing best practices for deploying Al/ML technologies Developing frameworks objective measures using NLP-based metrics to measure, track, and improve model performance and efficacy Santhana Chari VP, Broadband Analytics and Data Science OpenVault
					Leveraging JSON Data for a Network Data Chatbot
					Understanding the constraints; identifying corporate requirements and needs to further develop large language models (LLMs) Implementing a retrieval augmented generation (RAG) framework based on the LangChain orchestrator that runs an LLM agent Retrieving relevant network data in JSON snippets from a knowledge graph database Developing wider strategies to meet the requirements and needs in network data chatbots David Suh Lead Software Engineer Cox Communications
					Moderator Jan Neumann Senior Director, Applied Al Research Comcast
9.26.2024	Wireline Network Evolution	9:30 AM - 10:45 AM EST	The Loft	John Chapman CTO Broadband &	Evolution of Network Robustness and Resiliency in the CIN
	Driving End-to-End			Fellow Industry	Utilizing a number of approaches in the design process and evolution of the Cox CIN to provide network resilience Understanding how to provide network
	IP Networking			Mark Goodwin Lead Network Engineer Cox Communicatio ns	resilience such as BGP multi-homing and fine-tuning of IGP/BGP protocol timers for optimal convergence Deploying resiliency strategies including PTP architecture enhancement, QoS fine-tuning, routing optimizations to ensure optimal unicast/multicast reachability Increasing the use of Proactive Network Health (PNH) measures to identify potential failures in a preemptive
				Deependra Malla Network Design Engineer Cox	manner John Huang Lead Communications Network Engineer Cox Communications
				Cox Communicatio ns	Routing Packets in Provider Networks: A Multi-Service Operators' Perspective
				John Huang Lead Communicatio ns Network Engineer Cox Communicatio ns	Examining emerging approaches and strategies that are shaping the network architecture and routing design Optimizing routing protocols, meeting evolving security challenges and leveraging innovative technologies Understanding the role of multi-protocol label switching (MPLS) and segment routing (SR) in enhancing scalability, efficiency, flexibility, and network programmability Deependra Malla Network Design Engineer

		I		ı	
					Cox Communications  Modern BGP Route Reflection Architecture  Focusing on design principles and optimization for platform, architecture, and routing Examining architectural considerations and proposing enhancements to improve scalability and create efficiencies  Leveraging x86-appliances to achieve scalability, performance, and ease of management in BGP route reflection architecture  Understanding the trade-offs and implementing best practices while maintaining stability and fault tolerance  Mark Goodwin Lead Network Engineer Cox Communications
9.26.2024	Wireline Network Evolution  Operationalizing and Automating PON	9:30 AM - 10:30 AM EST	B401	Dr. Curtis Knittle Vice President, Wired Technologies CableLabs  Jon Schnoor Principle Architect, Wired Technologies CableLabs  Michael Emmendorfer Vice President of Technology Calix	Navigating Interoperability Hurdles for XGS-PON Within the Cable Access Network  Determining and overcoming the challenges to achieve interoperability as part of ITU-T based XGS-PON deployments  Evaluating the solutions and options for implementing ITU-T based PON technologies  Avoiding vendor lock in: How to maintain compatibility with legacy DOCSIS® provisioning and management systems  Jon Schnoor Principle Architect, Wired Technologies  CableLabs  Beyond 10G PON Technologies and Network Slicing  Exploring new use cases enabled by Passive Optical Networks (PON) and network slicing technologies  Determining whether the next generation of PON will be a more cost-effective approach in the CIN and open up new revenue streams  Deep dive into 10G, 25GS, 50G-ITU and 100+ PON technologies  Michael Emmendorfer  Vice President of Technology  Calix
9.26.2024	Al & Automation  Harnessing Al to Improve Network Reliability	11:30 AM - 12:45 PM EST	B407	Damian Poltz Senior Vice President, Wireline Networks Rogers Communicatio ns  Nivedhitha Sridhar Data Scientist Comcast  Madiha Sahar Presenter Rogers Communicatio ns	Smart Network: Graph-Based Network Analysis, Event Detection, and Outage Simulation  Understanding the importance of real-time end-to-end visibility of the network footprint to monitor the health of the network and traffic flow  Creating a blueprint by combining network topology with real-time device telemetry  Exploring how to leverage graph algorithms to enhance the robustness, scalability, and intelligence of the network infrastructure Nivedhitha Sridhar Data Scientist Comcast  Predictive Framework for Enhanced Wireline Network Reliability: Unveiling Anomalies and Streamlining Maintenance  Enhancing network reliability and performance by developing a framework to predict wireline network failures  Creating a tool with actionable insights to prioritize node maintenance and

			Dr. Jonathan Kwan Product Line Manager Fujitsu	facilitate field maintenance technicians  Evaluating operational benchmarks and KPIs to conducting root cause analysis and predict the future state of the network  Using the framework to enable the effective allocation of resources and enhance overall efficiency of network operations  Madiha Sahar Presenter Rogers Telecommunications Inc.  Alarm Root Cause Analysis Using AI/ML in MSO Networks  Balancing resources to investigate and manage networks Implementing AI/ML techniques to suppress alarms, locate and partition the root cause of an alarm storm with high accuracy Reducing time-to-solution to increase customer satisfaction and network reliability Jonathan Kwan Product Line Manager Fujitsu  Moderator Damian Poltz Senior Vice President, Wireline Networks Rogers Communications
9.26.2024	Wireline Network Evolution  Optimizing DOCSIS® Capacity	11:30 AM - 12:45 PM EST	Karthik Sundaresan Distinguished Technologist & Director of HFC solutions CableLabs  Jay Zhu Senior Principal Software Engineer Comcast  Saifur Rahman Distinguished Engineer Comcast  Richard Primerano Principal Engineer, Next Generation Access Network Comcast	Optimizing Spectrum Efficiency with Cloud-Based Load Balancing  Examining a novel approach to the DOCSIS® channel load balancing Leveraging real-time telemetry and control APIs to implement channel load balancing as a cloud-based microservice  Decoupling VCMTS functionalities and transforming them into reliable, flexible, and scalable services with operating observability  Assessing the effectiveness of the approach for:  Detecting imbalanced loads across the production network  Improving channel utilization distribution at a minimal cost Increasing spectrum utilization efficiency Improving the customer experience Jay Zhu  Senior Principal Software Engineer Comcast  Unlocking 5% More OFDM/OFDMA  Capacity with Cyclic Prefix Tuning  Tuning the cyclic prefix (CP) length to maximize throughput while still maintaining robust communication  Combining telemetry data captured from the live plant and real-time  FPGA-based channel emulation to assess the impact of CP length  Analyzing how CP overhead can be reduced to increase capacity across the network  Richard Primerano  Principal Engineer, Next Generation Access Network  Comcast  Extracting Additional DOCSIS® Upstream Capacity Without HFC Network Upgrades  Developing strategies to get additional capacity out of a DOCSIS® system without upgrading  Exploring methods to set upstream levels to add network capacity by setting

0.26.2024	Wiroling Notwork	11:30 AM	Jargal Madioda	gains are possible by adjusting the return level while still staying within the constraints of cable modem transmit power Building a blueprint of how an automatic system can dynamically adjust the upstream level of the DOCSIS® network Saifur Rahman Distinguished Engineer Comcast  Moderator Karthik Sundaresan Distinguished Technologist & Director of HFC solutions CableLabs  Boosting FTTH Network Performance:
9.26.2024	Wireline Network Evolution  Boosting Performance: PNM for Optical Networks	11:30 AM - 12:45 PM EST	Israel Madiedo Innovation &     Technology     Director izzi (Televisa)  Dr. Jason Rupe Distinguished     Technologist CableLabs  Robert-Jan van     Minnen Senior Manager     Network     Analytics &     Performance     Planning Liberty Global -     Liberty Tech  Mr. Ben Ragel Senior Engineer Rogers     Communicatio     ns	Making the organizational shift required to effectively monitor the end-to-end performance for FTTH customers Reviewing the performance for FTTH customers Reviewing the performance management strategy: Challenges and risks Fostering collaboration with cross-functional teams to strengthen the approach Recognizing the importance of continuous improvement and identifying key enhancements crucial for deployment Exploring the variances in architecture, protocols, telemetry, and operations Ben Ragel Senior PON Engineer Rogers Communications  The Fiber Folding Ruler: Creating A Common 'KPI Language' for Operating Fiber Networks  Exploring the challenges and opportunities of blending HFC and FTTH to manage faults, performance, and capacity in converged interconnect networks  Proposing a common language and framework for network KPIs Driving industry collaboration and co-development Robert-Jan van Minnen Senior Manager Network Analytics & Performance Planning Liberty Global  Operating Fiber Access the Cable Way: Challenges for the Industry to Overcome  Understanding the different levels of complexity maintenance and operations in PON  Building an optical operations and maintenance program that reduces troubleshooting and problem resolution time and costs while increasing network capacity and uptime  Defining use cases that align to general architecture functions and network operations needs including fault and failure management and failure modes  Identifying new potential capabilities to further reduce operations burdens  Jason Rupe  Distinguished Technologist  Cable Labs
9.26.2024	SCTE International Cable-Tec Games Awards	12:45 PM - 1:00 PM EST		Join us for the SCTE International Cable-Tec Games Awards ceremony as we celebrate the champions of the games.