

Day 1 - Tuesday, April 20, 2021			
Eastern Time Zone			
8:55 AM	9:00 AM	Opening Remarks by Giuseppe Sammartino, Conference Chair & Introduction of Dr. Emilio Barcelos	
9:00 AM	10:50 AM	Room 2: Workshop: Data Science in Transportation - Dr. Emilio Barcelos	
10:50 AM	11:00 AM	Workshop Q&A - Moderated by Giuseppe Sammartino	
11:00 AM	11:10 AM	Break	
11:10 AM	11:15 AM	Welcome and Introduction of Plenary Speaker - Edward F. Boyle by Thomas Costabile - ASME Executive Director/CEO - (Dave Schlesinger, Technical Program Chair to Introduce Tom)	
11:15 AM	12:00 PM	Room 1: Plenary Session - Edward F. Boyle - VP, Engineering, Norfolk Southern Railway	
12:00 PM	12:10 PM	Plenary Q&A - Moderated by Mehdi Ahmadian, Virginia Tech	
12:10 PM	12:20 PM	Break	
		ROOM 1	ROOM 2
12:20 PM	1:10 PM		Track 02-01 (A): Rail Equipment Engineering Track Chair: Jeffrey Gordon, Federal Railroad Administration; Co-Chair Bryan Schlake, Penn State Altoona Technical Paper Publication: JRC2021-58360 - New Locomotives & Technologies: Reducing Operating & Market Failures Through Use of Aggressive Reliability Growth Testing (RGT) Authors: Michael Iden - Tier 5 Locomotive LLC, Tom Kennedy - Kennedy Rail Consulting LLC 2020 Presentation: JRC2021-58443 - Crash Energy Management Design for the LACMTA Hr4000 Heavy Rail Vehicle Authors: Anbo Wang - LTK Engineering, Yanwen Liu - CRRC Changchun, Xiaofang Liu - CRRC MA, Steven W. Kirkpatrick - ARA, Virginia Phan - ARA, Robert T. Bocchieri - ARA 2020 Presentation: JRC2021-58423 - Estimating the Inner Ring Defect Size and Residual Service Life of Freight Railcar Bearings Using Vibration Signatures Authors: Jennifer Lima - University of Texas Rio Grande Valley (UTRGV), Constantine Tarawneh - University of Texas Rio Grande Valley (UTRGV), Jesse Aguilera - University of Texas Rio Grande Valley (UTRGV), Jonas Cuanang - University of Texas Rio Grande Valley (UTRGV) Technical Paper Publication: JRC2021-58520 - Updated Fuel Tank Puncture Survey, 1995-2020 Author: Karina Jacobsen - USDOT-Volpe Ctr
			Track 03-01: Signal and Train Control Track Chair: David Thurston, Canadian Pacific Railway 2020 Presentation: JRC2021-58289 - Access Point Placement Optimization for a CBTC System Wireless Data Communication Network, Authors: Arash Aziminejad - WSP, Yan He - WSP Canada 2020 Presentation: JRC2021-58467 - The Next Generation of Train Control for Canadian Heavy Haul Systems Author: David Thurston - Canadian Pacific Railway
1:10 PM	1:20 PM	Room #1 Q&A - LIVE	Room #2 Q&A - LIVE
1:20 PM	1:30 PM	Break	
		ROOM 1	ROOM 2
1:30 PM	2:25 PM	Track 09-01: Electrification Track Chair: John Grantham, Atkins; Co-Chair: Bih-Yuan Ku, National Taipei University of Technology Technical Paper Publication: JRC2021-58229 - OCS Rehabilitation and Keivar Contact Wire Fall Prevention-VTA, San Jose, CA Authors: Paul White - HNTB Corporation, Gerti Kola - HNTB Corporation, Ashraf Siddiq - Santa Clara Valley Transportation Authority, Alan Ng - HDR Incorporated Technical Paper Publication: JRC2021-58018 - Optimal Positioning of Wayside Energy Storage Systems in Local Transport Networks Authors: Philip Otto - Karlsruhe Institut of Technology, Peter Gratzfeld - Karlsruhe Institut of Technology Technical Paper Publication: JRC2021-58498 - The Adoption of Aluminum Stainless Steel Conductor Technology in North America Author: Keith Forman - Conductix, Inc. Technical Paper Publication: JRC2021-58512 - Analysis of 3rd Rail Condition and Performance With a Data Acquisition Suite Author: Trevor Howe - Conductix-Wampfler, Ryan Frost - Conductix-Wampfler Keith Forman - Conductix-Wampfler	Track 05-01 (A): Planning and Development Track Chair: Jeffrey Gordon, Federal Railroad Administration Technical Presentation Only: JRC2021-67907 - Configuration Management - It's Time to Get Into the Game! Author: Brian Donohue - WSP, USA Technical Presentation Only: JRC2021-58392 - Departure Status Prediction From Railyards Using Machine Learning Algorithms Authors: Niloofar Minbashi - KTH Royal Institute of Technology, Markus Bohlin - KTH Royal Institute of Technology, Carl-William Palmqvist - Lund University, Behzad Kordnejad - KTH Royal Institute of Technology Technical Presentation Only: JRC2021-66702 - Network Centrality and Long-Term Investment Decisions for Railroad Networks Authors: Pierre Carriere - Western New England University, Myungseob Kim - Western New England University, Paul Schonfeld - University of Maryland, College Park, Fei Wu - University of Maryland, College Park Technical Presentation Only: JRC2021-58525 - A Mini-Network Simulation Approach to Investigate the Capacity and Safety Aspects of National Rail Network Authors: Hamed Pouryousef - Sharma & Associates, Inc., Monique Stewart - FRA, Som Singh - Sharma & Associates, Inc, Anand Prabhakaran - Sharma & Associates, Inc
2:25 PM	2:35 PM	Room #1 Q&A - LIVE	Room #2 Q&A - LIVE
2:35 PM	2:45 PM	Break	
		ROOM 1	ROOM 2
2:45 PM	3:35 PM	Track 01-02 (B): Railroad Infrastructure Engineering Track Chair: Deb Mishra, Oklahoma State University 2020 Presentation: JRC2021-58300 - Study of Prestressed Concrete Prisms Using a Parallel Computing Algorithm Authors: Mochul Shin - Western New England University, Abdoulaye Diallo - Western New England University, Changhoon Lee - Western New England University 2020 Presentation: JRC2021-58518 - Field Investigation of Broken Cut Spikes on Elastic Fasteners Using Instrumented Spikes at Fast Authors: Yin Gao - Transportation Technology Center, Mike Mchenry - Transportation Technology Center, Inc., Megan Brice - Transportation Technology Center, Inc., Jay Baillargeon - Federal Railroad Administration Technical Paper Publication: JRC2021-58496 - Effect of Longitudinal Fastener Stiffness and Fastening System Loading Authors: Christian Khachatourian - University of Illinois at Urbana-Champaign, Marcus Dersch - University of Illinois at Urbana-Champaign, J. Riley Edwards - University of Illinois at Urbana-Champaign, Matheus Trizotto - University of Illinois at Urbana-Champaign Technical Presentation Only: JRC2021-58366 - Laboratory and Numerical Investigations on the Performance of Flowable Soil as a Sustainable Backfill for Railway Bridge Transition Authors: Tack-Woo Lee - Korea Railroad Network Authority, Tri Ho Minh Le - Kusan National University, Dae-Wook Park - Kusan National University, Jung-Woo Seo - Kusan National University Technical Paper Publication: JRC2021-58396 - Stabilization of Railroad Ballast Using Polyurethane Under Various Coal Fouling Conditions Authors: Dinesh Gundavaram - Indian Institute of Technology Patna, Hussaini Syed Khaja Karimullah - Indian Institute of Technology Patna 2020 Presentation: JRC2021-58244 - Locomotive Crash Energy Management Vehicle-to-Vehicle Impact Test Results Authors: Patricia Llana - USDOT Volpe Center, Karina Jacobsen - USDOT Volpe Center, Richard Stringfellow - CAMX Power	Track 02-02 (B): Rail Equipment Engineering Track Chair: Jeffrey Gordon, Federal Railroad Administration; Co-Chair Bryan Schlake, Penn State Altoona 2020 Presentation: JRC2021-58526 - An Evaluation of Passenger Mass Effects in Crashworthiness Analyses of Heavy Rail Vehicles, Authors: Steven Kirkpatrick - Applied Research Associates, Inc., Robert T. Bocchieri - ARA Inc., Alexander Zeigle - Applied Research Associates, Inc., Xiaofang Liu - CRRC MA Corporation, Anbo Wang - CRRC MA Corporation, Liu Yanwen - CRRC - Changchun Railway Vehicles Co. 2020 Presentation: JRC2021-65749 - Railclad™ for Welding Aluminum-to-Steel in Train Carbody Structures Authors: David Gauthier - NobelClad, Eddgar Vidal - NobelClad Haley Reiersgord - NobelClad Technical Paper Publication: JRC2021-58425 - Progress in Railway Mechanical Engineering - 2019-2020 Survey - Locomotives Author: Timothy Mast - Virginia Tech Technical Paper Publication: JRC2021-59109 - Estimation of Pre-Covid19 Daily Ridership Patterns From Paper and Electronic Ticket Sales Data With Origin-Destination, Time-of-Day, and Train-Start Detail on a Commuter Railroad: Quick-Response Big Data Analytics in a World Steeped With Tradition Authors: Alex Lu - Metro-North Commuter Railroad, Thomas Marchwinski - Metro-North Commuter Railroad, Robert Culhane - Metropolitan Transportation Authority Finance, Xiaojing Wei - Metropolitan Transportation Authority Construction & Development Technical Paper Publication: JRC2021-60425 - Scheduling Maintenance Technicians in a Railway Depot Authors: Tiago Alves - IDMEC, Instituto Superior Técnico, Universidade de Lisboa, Antonio R. Andrade - IDMEC, Instituto Superior Técnico, Universidade de Lisboa
			Room #3 Q&A - LIVE

3:35 PM	3:45 PM	Room #1 Q&A - LIVE	Room #2 Q&A - LIVE	Room #3 Q&A - LIVE
3:45 PM	3:55 PM	Break		
		ROOM 1	ROOM 2	ROOM 3
3:55 PM	4:45 PM	Track 01-04 (D): Railroad Infrastructure Engineering Track Chair: Deb Mishra, Oklahoma State University	Track 12-01 (A): New Technologies Track Chair: Mehdi Ahmadian, Virginia Tech; Co-Chair: Milad Hosseinipour, IEEE	Track 06-02 (B): Safety and Security Track Chair: Dave Schlesinger, Parsons
		Technical Paper Publication: JRC2021-58511 - A Review of Parameters Effecting Rail Break Gap Size Using Analytical Methods Authors: Mathews Trizotto - RailTEC, Max Potvin - RailTEC, Marcus Dersch - RailTEC, J. Riley Edwards - RailTEC, Arthur De Oliveira Lima - RailTEC	Technical Paper Publication: JRC2021-58324 - Rail Neutral Temperature Estimation Using Field Data, Numerical Models, and Machine Learning. Authors: Yuning Wu - University of Utah, Xuan Zhu - University of Utah, Chi-Luen Huang - University of Illinois at Urbana-Champaign, Sangmin Lee - University of Illinois at Urbana-Champaign, Marcus Dersch - University of Illinois at Urbana-Champaign, John Popovics - University of Illinois at Urbana-Champaign	Technical Paper Publication: JRC2021-58527 - An Evaluation of Derailment Mechanics and Derailment Analysis Methodologies Author: Steven Kirkpatrick - Applied Research Associates, Inc.
		2020 Presentation: JRC2021-58349 - Considerations for Sensor Selection for Detecting Top-of-Rail (TOR) Lubrication Authors: Timothy Mast - Virginia Tech, Campbell Neighborgall - Virginia Tech, Masood Taheri - Virginia Tech, Carvel Holton - Virginia Tech, Mehdi Ahmadian - Virginia Tech	Technical Paper Publication: JRC2021-58346 - Advanced Enterprise Asset Management Systems: Improve Predictive Maintenance and Asset Performance by Leveraging Industry 4.0 and the Internet of Things (IoT) Authors: Sravani Tadanki - Parsons Corporation, Sandeep Bhanji - Parsons Corporation, Howard Shatz - Parsons Corporation, Patrick Warren - Berger-Levrault Canada, Youssef Miloudi - CARL Berger-Levrault	Technical Presentation Only: JRC2021-58515 - Characterizing the Performance of Tank Car Pressure Relief Devices Under Derailment Fire Conditions – Flammable Fuel Tests Authors: Anand Prabhakaran - Sharma & Associates, Inc., Francisco Gonzalez, III - Federal Railroad Administration, Graydon Booth - Sharma & Associates, Inc., Frank Otrema - BAM
		2020 Presentation: JRC2021-58014 - Development of Predictive Analytics Using Autonomous Track Geometry Measurement System Data Authors: Jay Baillargeon - Federal Railroad Administration, Daniel Einbinder - ENSCO Inc., Radim Bruzek - ENSCO, Inc.	Technical Presentation Only: JRC2021-58524 - A Data-Driven Framework for Railroad Crossing Property Status: Evaluation, Design Diagnosis, and Prediction Authors: Emilio Barcelos - Alstom Signaling Operations LLC, Zengyan Wang - Alstom Signaling Operations LLC, Mahdi Seyednezhad - Alstom Signaling Operations LLC, Hector Rojas - Alstom Signaling Operations LLC, Nenad Mijatovic - Alstom Signaling Operations LLC	Technical Presentation Only: JRC2021-58740 - Effect of Tank Car Placement on Hazardous Material Train Accident Severity Authors: Chen-Yu Lin - University of Illinois at Urbana-Champaign, Jaemin Kim - University of Illinois at Urbana-Champaign, Xinhao Liu - University of Illinois at Urbana-Champaign, Christopher Barkan - University of Illinois at Urbana-Champaign
		Technical Paper Publication: JRC2021-58347 - Intermediate Distance Testing of Optical Tor Lubricity Sensors on a Remote-controlled Rail Cart Authors: Timothy Mast - Virginia Tech, Yu Pan - Virginia Tech, Carvel Holton - Virginia Tech, Mehdi Ahmadian - Virginia Tech	Technical Presentation Only: JRC2021-58531 - Conditions Influencing Mudslides as Seen Through Radar Coherence Images Authors: Sumanth Byraruji - University of South Carolina, Dimitris Rizos - University of South Carolina	Technical Presentation Only: JRC2021-58225 - Railway and Transit Hazard Resolution Challenges Author: Amin Kalbasi - Parsons, Inc.
			2020 Presentation: JRC2021-58329 - Design and Bench Tests of a Smart Railroad Tie for Energy Harvesting Authors: Yu Pan - Virginia Tech, Lei Zuo - Virginia Tech, Mehdi Ahmadian - Virginia Tech	2020 Presentation: JRC2021-58419 - Raking Impact of a Diesel Multiple Unit Fuel Tank: Tests and Analysis Author: Karina Jacobsen - USDOT-Volpe Ctr, Michael Carolan, USDOT-Volpe Ctr
4:45 PM	4:55 PM	Room #1 Q&A - LIVE	Room #2 Q&A - LIVE	Room #3 Q&A - LIVE
4:55 PM	5:15 PM	Room 1: Social Networking Event Sponsored by the League of Railway Women (LRW)		
5:15 PM		Day 1 Concludes		
Day 2 - Wednesday, April 21, 2021				
8:55 AM	9:00 AM	Welcome to Day 2 – Giuseppe Sammartino - Conference Chair/ Dave Schlesinger, Parsons, Technical Program Chair		
9:00 AM	9:50 AM	Room 1: Keynote: Theresa M. Impastato, EVP, Washington Metropolitan Area Transit Authority (WMATA) - Introduction by Milad Hosseinipour, IEEE		
9:50 AM	10:00 AM	Keynote Q&A - Moderated by Milad Hosseinipour, IEEE		
10:00 AM	10:10 AM	Break		
		ROOM 1	ROOM 2	ROOM 3
10:10 AM	11:00 AM	Track 06-03 (C): Safety and Security Track Chair: Dave Schlesinger, Parsons	Track 11-01: Railroad History Track Chair: Michael Iden, Tier 5 Locomotive LLC; Co-Chair, Timothy Mast, Virginia Tech	Track 08-01: Urban Passenger Rail Transport Track Chair: Brian Donohue, WSP
		Technical Paper Publication: JRC2021-58523 - Secondary Impact Protection for Locomotive Engineers - Improved Bag Design Authors: Florentina Gantoi - Sharma & Associates, Inc., Jeffrey Gordon - Federal Railroad Administration, Anand Prabhakaran - Sharma & Associates, Inc., Som Singh - Sharma & Associates, Inc	Technical Presentation Only: JRC2021-58399 - Going Off the Rails: Exploring the Impact of the Railroad on the Development of Musical Culture in Kansas City, Missouri (1869–1905) Author: Gabriella Roderer - University of Missouri-Kansas City	Technical Paper Publication: JRC2021-58382 - Monorail Technology Review: A Medium Capacity Transit Solution for Space Constrained Urban Environments — A Technical and Operational Review Author: Fabio Barbosa - FCB Research
		Technical Presentation Only: JRC2021-66825 - Transportation Resilience Models for Supply Chain Analysis Using Complex Network Theory (CNT) Authors: Yalda Saadat - University of Maryland College Park, Bilal Ayyub - University of Maryland, College Park, Jennifer Helgeson - National Institute of Standards and Technology, Sally Saleem - University of Maryland College Park	2020 Presentation: JRC2021-58463 - A North American Historical Review of Three-Axle Freight Trucks Authors: William Shust - Objective Engineers Inc, Michael M. Palmieri - Retired	Technical Paper Publication: JRC2021-58377 - Multimodal Mobility Framework: Seamless Mobility Experience Authors: Jian Sun - Hitachi Rail, Ravigopal Vennelakanti - Hitachi America Ltd. R&D, Malarvizhi Sankaranarayanan - Hitachi America Ltd. R&D, Ramyar Saeedi - Hitachi America Ltd. R&D, Rahul Vishwakarma - Hitachi America Ltd. R&D, Prasad Singh - Hitachi America Ltd. R&D, Yushi Akiyama - Hitachi America Ltd., Hisao Adachi - Hitachi America Ltd.
		Technical Presentation Only: JRC2021-58756 - Keeping Cyber Security on Track Authors: Dave Schlesinger, Parsons	2020 Presentation: JRC2021-58327 - 2019 Nominations for ASME Historic Mechanical Engineering Landmark Status, Rail Transportation Category Author: Michael Iden - Tier 5 Locomotive LLC	
			2020 Presentation: JRC2021-60508 - American Railroad Freight Cars: 100 Years of Progress — 1920 to 2020 Author: Shaun Richmond - Trinity Rail	
			2020 Presentation: JRC2021-59946 - Current and Voltage Choice for North American Railroad Electrifications, 1895-1931 Author: John Allen - Independent Consultant	
11:00 AM	11:10 AM	Room #1 Q&A - LIVE	Room #2 Q&A - LIVE	Room #3 Q&A - LIVE
11:10 AM	11:20 AM	Break		
		ROOM 1	ROOM 2	ROOM 3
11:20 AM	11:55 AM	Track 05-02 (B): Planning and Development Track Chair: Jeffrey Gordon, Federal Railroad Administration	Track 07-01: Energy Efficiency and Sustainability Track Chair: Brian Donohue, WSP	
		Technical Presentation Only: JRC2021-66790 - Weights and Their Consideration in Topological Analysis of Rail Networks Authors: Majed A. Hamed - Center for Technology and Systems Management, Department of Civil and Environmental Engineering, Bilal M. Ayyub - Center for Technology and Systems Management, Department of Civil and Environmental Engineering, Magdy Elsibaie - Center for Technology and Systems Management, Department of Civil and Environmental Engineering, Yujie Mao - Center for Technology and Systems Management, Department of Civil and Environmental Engineering, Yalda Saadat - Center for Technology and Systems Management, Department of Civil and Environmental Engineering, Tarek Omar - Office of Research and Development, Federal Railroad Administration	Technical Paper Publication: JRC2021-58271 - Hybrid Rail Technology Review: An Intermediate Pathway for Electrifying the Freight and Passenger Commuter Rail Sector Author: Fabio Barbosa - FCB Research	
		Technical Presentation Only: JRC2021-66820 - Optimizing Topology of Rail Networks: The Case of Reclassing, Acquisition, and Repurposing of Tracks Authors: Yujie Mao - Center for Technology and Systems Management, Bilal M. Ayyub - Center for Technology and Systems Management, Magdy Elsibaie - Center for Technology and Systems Management, Yalda Saadat - Center for Technology and Systems Management, Tarek Omar - Office of Research and Development, Federal Railroad Administration	Technical Paper Publication: JRC2021-58378 - Battery Electric Locomotives & Battery Tenders: Operational & Infrastructure Challenges to Widespread Adoption Author: Michael Iden - Tier 5 Locomotive LLC	
		Technical Presentation Only: JRC2021-66845 - Fractals and Rail Network Topology: Renormalization for Their Identification and Characterization Authors: Donald Dzedzy - University of Maryland, Yujie Mao - University of Maryland, Bilal Ayyub - University of Maryland	Technical Paper Publication: JRC2021-58326 - Energy Harvesting Device for Powering Onboard Condition Monitoring Modules in Rail Service Authors: Martin Amaro - University of Texas Rio Grande Valley, Constantine Tarawneh - University of Texas-Pan American, Heinrich Foltz - University of Texas Rio Grande Valley, Roberto Garcia - University of Texas Rio Grande Valley	
			2020 Presentation: JRC2021-58424 - Optimizing Power Consumption of Freight Railroad Bearings Using Laboratory Experimental Data Authors: Carlos Lopez III - University of Texas Rio Grande Valley, Constantine Tarawneh - University of Texas Rio Grande Valley, Arturo Fuentes - University of Texas Rio Grande Valley, Harry Siegal - University of Texas Rio Grande Valley	
11:55 AM	12:05 PM	Room #1 Q&A - LIVE	Room #2 Q&A - LIVE	

12:05 PM		12:15 PM		Exhibitor Corner - Shift5 Live Presentation		
12:15 PM		12:35 PM		Break		
12:35 PM		ROOM 1	ROOM 2	ROOM 3		
12:35 PM		1:25 PM	Track 10-01 (A): Vehicle Track Interaction Track Chair: Anand Prabhakaran, Sharma & Associates; Co-Chair: Jeffrey Gordon, Federal Railroad Administration	Track 06-04 (D): Safety and Security Track Chair: Dave Schlesinger, Parsons	Track 12-02 (B): New Technologies Track Chair: Mehdi Ahmadian, Virginia Tech; Co-Chair: Milad Hosseinpour, IEEE	
		Technical Paper Publication: JRC2021-58433 - An Experimental Study of the Influence of the Amount of Top-of-Rail Friction Modifiers on Traction Authors: Yu Pan - Virginia Tech, Ahmad Radmehr - Virginia Tech, Mehdi Ahmadian - Virginia Tech, Ali Tajaddini - Federal Railroad Administration	Technical Paper Publication: JRC2021-58223 - Safety Integrity Level (SIL) Allocation on Monorail Rolling Stock Author: James Li - Parsons	Technical Paper Publication: JRC2021-58435 - Performance Evaluation of a Novel Optical Sensing System for Detecting Rail Lubricity Conditions, Authors: Yu Pan - Virginia Tech, Timothy Mast - Virginia Tech, Carvel Holton - Virginia Tech, Mehdi Ahmadian - Virginia Tech		
		Technical Paper Publication: JRC2021-58381 - A Statistical Approach to Evaluating Wheel-Rail Contact Dynamics Authors: Sayedmohammad Hosseini - Virginia Polytechnic Institute and State University, Arash Hosseini Ahangarnejad - Virginia Polytechnic Institute and State University, Ahmad Radmehr - Virginia Polytechnic Institute and State University, Ali Tajaddini - Federal Railroad Administration Office of Research, Development, and Technology, Mehdi Ahmadian - Virginia Polytechnic Institute and State University	Technical Presentation Only: JRC2021-58773 - Benchmarking Railroad Safety Performance Between the United States and the United Kingdom, Authors: Chen-Yu Lin - University of Illinois at Urbana-Champaign, Theodore Gerstein - University of Illinois at Urbana-Champaign, Christopher Barkan - University of Illinois at Urbana-Champaign	2020 Presentation: JRC2021-58291 - Forward-Looking Infrared Radiometry (FLIR) Application for Detecting Ballast Fouling Authors: SayedMohammad Hosseini - Virginia Polytechnic Institute and State University, Yongwen Tan - Virginia Polytechnic Institute and State University, Mehdi Ahmadian - Virginia Polytechnic Institute and State University		
		Technical Paper Publication: JRC2021-58471 - Development of a New Approach Measuring the Wheel/Rail Interaction Loads Authors: Rustam Rahimov - Emperor Alexander I St. Petersburg State Transport University, Waail Mahmood Lafta - Griffith University, Yuriy Boronenko - Emperor Alexander I St. Petersburg State Transport University	Technical Presentation Only: JRC2021-58753 - Institutional Memory, Training, and Organizational Safety Culture Author: Dave Schlesinger - Parsons	Technical Presentation Only: JRC2021-58245 - Balance Velocity of Wheelset and Hunting Eliminator Author: Jack Huang - High Tech Pressure Safety		
		Technical Paper Publication: JRC2021-58519 - Modelling the Effect of Track Stiffness Variation on Wheel Rail Interaction Using Finite Element Method, Authors: Lovejoy Mutswatwa - Addis Ababa University, Celestin Nkundineza - Addis Ababa University, Mehmet Guler - American University of the Middle East	Technical Presentation Only: JRC2021-58418 - Improving Highway-Rail Safety at Cognitively Complex Intersections: Examining the Impact of Short-Storage Crossings on Driver Decision Behavior and Incident Outcome Authors: Elizabeth Veinott - Michigan Technological University, Anne Linja - Michigan Technological University, David Nelson - Michigan Technological University, Pasi Lautala - Michigan Technological University			
			Technical Paper Publication: JRC2021-58421 - Raking Impact and Analysis of a Diesel Multiple Unit Fuel Tank Author: Karina Jacobsen - USDOT-Volpe Ctr, Michael Carolan, USDOT-Volpe Ctr			
1:25 PM		1:35 PM	Room #1 Q&A - LIVE	Room #2 Q&A - LIVE	Room #3 Q&A - LIVE	
1:35 PM		1:45 PM		Break		
1:45 PM		ROOM 1	ROOM 2	ROOM 3		
1:45 PM		2:30 PM	Track 10-02 (B): Vehicle Track Interaction Track Chair: Anand Prabhakaran, Sharma & Associates; Co-Chair: Jeffrey Gordon, Federal Railroad Administration	Track 01-03 (C): Railroad Infrastructure Engineering Track Chair: Deb Mishra, Oklahoma State University		
		2020 Presentation: JRC2021-58363 - Investigating the Influence of Angle of Attack (Yaw) on Wheel-Rail Interface (WRI) Dynamics Authors: Ahmad Radmehr - Virginia Tech, Arash Hosseini Ahangarnejad - Virginia Tech, Yu Pan - Virginia Tech, Sayedmohammad Hosseini - Virginia Tech, Ali Tajaddini - Federal Railroad Administration, Mehdi Ahmadian - Virginia Tech	Technical Presentation Only: JRC2021-58483 - Development of Deep Convolutional Neural Networks (DCNNs) and Change Detection Technology for Improved Railway Track Inspection Authors: Ryan Harrington - University of Illinois at Urbana Champaign, John Edwards - University of Illinois at Urbana Champaign, Richard Fox-Ivey - Railmetrics, Arthur De Oliveira Lima - University of Illinois at Urbana Champaign, John Laurent - Railmetrics			
		2020 Presentation: JRC2021-58364 - Wheel-Rail Contact Patch Geometry Measurement and Shape Analysis Under Various Loading Conditions, Authors: Ahmad Radmehr - Virginia Tech, Arash Hosseini Ahangarnejad - Virginia Tech, Yu Pan - Virginia Tech, Sayedmohammad Hosseini - Virginia Tech, Ali Tajaddini - Federal Railroad Administration, Mehdi Ahmadian - Virginia Tech	Technical Presentation Only: JRC2021-58486 - Prioritization of Focus Areas - Wireless Continuous Monitoring of Track Condition and Stress State Exception Reporting Authors: Ian Gergoglio Barbosa - University of Illinois Urbana Champaign, John Riley Edwards - University of Illinois at Urbana Champaign, Arthur De Oliveira Lima - University of Illinois at Urbana Champaign, Marcus Scott Dersch - University of Illinois at Urbana Champaign, Josue Cesar Bastos - University of Illinois at Urbana Champaign			
		2020 Presentation: JRC2021-58494 - Thermal Effects on Wheel Performance Based on Twin Disc Testing Authors: Ding Qing Li - TTCI, Monique Stewart - Federal Railroad Administration	Technical Presentation Only: JRC2021-64776 - An IoT Proposal to Monitor and Maintain Rail Infrastructure Author: Antonio Lugara - Hitachi Vantara			
		2020 Presentation: JRC2021-58406 - A Computationally Efficient Algorithm for Simulating the Dynamic Train-Track Interaction Authors: Arya Datta - University of South Carolina, Dimitris Rizos - University of South Carolina, Yu Qian - University of South Carolina, Robert Mullen - University of South Carolina	Technical Paper Publication: JRC2021-58468 - A Systems Approach for the Evaluation and Rebuilding of the Rogers Pass Systems on Canadian Pacific, Author: David Thurston - Canadian Pacific Railway			
2:30 PM		2:40 PM	Room #1 Q&A - LIVE	Room #2 Q&A - LIVE	Room #3 Q&A - LIVE	
2:40 PM		2:50 PM		Break		
2:50 PM		3:40 PM		Room 1: Grand Challenge - Chair: Milad Hosseinpour, IEEE; Co-Chair: Mehdi Ahmadian, Virginia Tech		
3:40 PM		3:50 PM		Q&A		
3:50 PM		4:00 PM				
4:00 PM		4:35 PM	Track 10-03 (C): Vehicle Track Interaction Track Chair: Anand Prabhakaran, Sharma & Associates; Co-Chair: Jeffrey Gordon, Federal Railroad Administration		Track 12-04 (D): New Technologies Track Chair: Mehdi Ahmadian, Virginia Tech; Co-Chair: Milad Hosseinpour, IEEE	
		Technical Paper Publication: JRC2021-58311 - Multiscale Simulation Based Mixed Train Derailment Analysis: A Case Study Authors: Yi Wang - Canadian Pacific Railway/Simon Fraser University, Kyle Mulligan - Canadian Pacific Railway, Steven Nich - Canadian Pacific Railway, Kevin Oldknow - Simon Fraser University, G. Gary Wang - Simon Fraser University		2020 Presentation: JRC2021-58314 - Coefficients of Friction—Static Versus Dynamic Author: Jack Huang - High Tech Pressure Safety		
		Technical Presentation Only: JRC2021-60378 - Railroad Forces During Curve Negotiations and Definition of the Balance Speed Authors: Hao Ling - University of Illinois at Chicago, Ahmed A. Shabana - University of Illinois at Chicago		2020 Presentation: JRC2021-58417 - Optimization of Railroad Bearing Health Monitoring System for Wireless Utilization Authors: Jonas Cuanang - University of Texas Rio Grande Valley, Constantine Tarawneh - University of Texas Rio Grande Valley, Martin Amaro - University of Texas Rio Grande Valley, Heinrich Foltz - University of Texas Rio Grande Valley		
		2020 Presentation: JRC2021-58361 - Surface Profile and Third-Body Layer Accumulation Measurement Using a 3d Laser Profiler, Authors: Ahmad Radmehr - Virginia Tech, Arash Hosseini Ahangarnejad - Virginia Tech, Ali Tajaddini - Federal Railroad Administration, Mehdi Ahmadian - Virginia Tech		2020 Presentation: JRC2021-62280 - A Field Demonstration Study of Using Off-the-Shelf Sensors to Monitor Rail Tank Cars Carrying Dangerous Goods, Authors: Chris Ladubec - National Research Council Canada, Chengbi Dai - National Research Council Canada, Yan Liu - National Research Council Canada, Isabelle Roy - Transport Canada, Transportation of Dangerous Goods		
				2020 Presentation: JRC2021-58522 - Railroad Freight Car Remote Controlled Electrically Driven Set & Release Hand Brake (Edhb) - Optimization for Increased Reliability and Performance Authors: David Brabb - Sharma & Associates, Inc., Anand Prabhakaran - Sharma & Associates, Inc., Monique Stewart - Federal Railroad Administration		
4:35 PM		4:45 PM	Room #1 Q&A - LIVE		Room #3 Q&A - LIVE	
4:45 PM		Conference Ends				