

AAR/ MxV Rail University Days

DAY 1, TUESDAY, AUGUST 9, 2022 Pueblo Convention Center 320 Central Main St, Pueblo, CO 81003

TIME		AGENDA ITEM	PRESENTERS
7:00 AM	8:00 AM	Arrive & Full Breakfast	
8:00 AM	8:15 AM	Safety Briefing & Welcome	Anish Poudel, Principal Investigator
8:15 AM	8:45 AM	Railroad Invited Speaker I	Jay Monaco Amsted Rail
8:45 AM	9:15 AM	MxV Rail Overview and AAR Strategic Research Initiatives	Scott Cummings, AVP Research & Innovation
9:15 AM	9:40 AM	Facility for Accelerated Service Testing (FAST)	Chris Johnson, Scientist
9:40 AM	10:10 AM	BREAK	
10:10 AM	10:40 AM	RR Invited Speaker II	Mark Richards EVRAZ
10:40 AM	11:05 AM	AAR Mechanical and Vehicle Dynamics Research	Adam Klopp, Principal Investigator
11:05 AM	11:30 AM	AAR Infrastructure Research	Ananyo Banerjee, Principal Investigator
11:30 AM	12:30 PM	LUNCH & NETWORKING	
12:30 PM	1:00 PM	Railroad Invited Speaker III	Gregory Grissom Loram Technologies Inc.
1:00 PM	1:30 PM	AAR Inspection & Detection Research	Anish Poudel, Principal Investigator
1:30 PM	1:45 PM	Closing Session	
1:45 PM	2:15 PM	BREAK	
2:15 PM	4:00 PM	MxV Rail Laboratory Tours/ Technology Showcase 350 Keeler Pkwy, Pueblo, CO 81001	MxV Rail Engineers/ Researchers
4:00 PM	4:00 PM	ADJOURN	
6:00 PM	6:00 PM	Social Hour and Dinner	TBD



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DAY 2, WEDNESDAY, AUGUST 10, 2022 Pueblo Convention Center 320 Central Main St, Pueblo, CO 81003

TIME		AGENDA ITEM	PRESENTERS
8:00 AM	8:15 AM	Safety Briefing	Chris Johnson, Scientist
8:15 AM	8:30 AM	University Programs Overview Current and future Grand Challenges	Anish Poudel, Principal Investigator
8:30 AM	9:00 AM	Distributed Acoustic Sensing (DAS) for Intelligent inmotion Rail Inspection and Condition Monitoring	Hossein Taheri, Georgia Southern University
9:00 AM	9:30 AM	In-Motion Nondestructive Stress Measurement in Rail	Glenn Washer, University of Missouri
9:30 AM	10:00 AM	Continuous Railroad Track Health Monitoring Using Distributed Fiber Optic Sensor	Hai Huang, Penn State University
10:00 AM	10:30 AM	BREAK	
10:30 AM	11:00 AM	Assessment of In-Motion Thermography Inspection for the Rail Base Area	James Mathias, Southern Illinois University Carbondale
11:00 AM	11:30 AM	Estimation of axial stress in welded rails via a vibration-based nondestructive technique	Piervincenzo Rizzo, University of Pittsburgh
11:30 AM	12:00 PM	Early Diagnosis of Track Stability through Non- contact LiDAR Measurements and Unsupervised Machine Learning Algorithms	Mehdi Ahmadian, Virginia Tech
12:00 PM	12:30 PM	Current and Future Grand Challenges Discussions	Chris Johnson and Anish Poudel, MxV Rail
12:30 PM	1:00 PM	ADJOURN/ BOX LUNCH	



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MxV Lab Tours/ Technology Showcase at 350 Keeler Parkway DAY 1, TUESDAY, AUGUST 9, 2022

Presentation	Presenters
NDE-METLAB Tour	Ananyo Banerjee
Testing Laboratory Tours	Andrew Hawk
Railway Bridges	Chris Johnson
Substructure	Dante DeVencenty
Predictive Analytics	Silvia Galvan-Nunez
Ties and Fasteners	Ekrem Koc
Scientific Software	Patricia Schreiber
Air Brakes	Yi Wang
Puebloplex Capabilities	MaryClara Jones
Vehicle Dynamics	Jack Schultz
Inspection Systems	Survesh Shrestha
Bearing Research	Dustin Clasby