

Moscow time	China time	New York time	August 19, 2021			
13:00-13:20	18:00-18:20	06:00-06:20	Poster workshop rail 3 (5 posters)	Workshop on railway turnout benchmarking	Poster workshop road 3 (5 posters)	Poster workshop road 4 (5 posters)
13:20-14:00	18:20-19:00	06:20-07:00	Plenary session: State-of-art paper 5			
14:00-17:20	19:00-22:20	07:00-10:20	Rail 5 session (10 papers)	Rail 6 session (10 papers)	Road 5 session (10 papers)	Road 6 session (10 papers)
17:20-18:00	22:20-23:00	10:20-11:00	Closing ceremony and announcement of next IAVSD venue			

Moscow time	China time	New York time	August 19, 2021			
13:00-13:20	18:00-18:20	06:00-06:20	Poster workshop rail 3 topic:		Running Performance and Safety	
			Poster workshop rail 3 chair:		Professor Alexander Tretiakov	
			Poster workshop rail 3 moderator:		Panchenko Maxim	
13:00-13:03	18:00-18:03	06:00-06:03	Paper No.:	006	Olga Markova, Helena Kovtun, Viktor Maliy	Comparison of Articulated and Conventional Passenger Train Dynamic Characteristics at Various Motion Regime:
13:03-13:13	18:03-18:18	06:03-06:06	Paper No.:	119	Ekaterina Poliakova	Features of the aerodynamics of the undercar space of the high-speed rolling stock
13:13-13:09	18:18-18:09	06:06-06:09	Paper No.:	223	Alfonso Panunzio, Xavier Quost	Assessing track geometry irregularities with accelerometric measurements
13:09-13:12	18:09-18:12	06:09-06:12	Paper No.:		EMPTY	
13:12-13:15	18:12-18:15	06:12-06:15	Paper No.:		EMPTY	
13:00-13:20	18:00-18:20	06:00-06:20	Workshop on railway turnout benchmarking		Switches & Crossings Benchmark: Results and outcome	
			Workshop leaders:		Yann Bezin and Björn Pålsson	
			Workshop moderator:		Poliakov Boris	

13:00-13:20	18:00-18:20	06:00-06:20	Poster workshop road 3 topic:		Heavy vehicles	
			Poster workshop road 3 chair:		Dr. Shinichiro Horiuchi	
			Poster workshop road 3 moderator:		Dauksha Anfisa	
13:00-13:03	18:00-18:03	06:00-06:03	Paper No.:	110	Manuel Tentarelli, Alessandro De Felice, Silvio Sorrentino	Cold judder in tractor drivelines: an essential model for stability analysis
13:03-13:13	18:03-18:18	06:03-06:06	Paper No.:	044	Alessandro De Felice, Matteo Mercantini, Silvio Sorrentino	Stability analysis of pusher articulated bus with hydraulic joint
13:13-13:09	18:18-18:09	06:06-06:09	Paper No.:	170	Pontus Fyhr, Leon Henderson	A model for energy consumption in heavyvehicle braking
13:09-13:12	18:09-18:12	06:09-06:12	Paper No.:		EMPTY	
13:12-13:15	18:12-18:15	06:12-06:15	Paper No.:		EMPTY	
13:00-13:20	18:00-18:20	06:00-06:20	Poster workshop road 4 topic:		Vehicle control	
			Poster workshop road 4 chair:		Professor Makoto Yamakado	
			Poster workshop road 4 moderator:		Gusev Artem	
13:00-13:03	18:00-18:03	06:00-06:03	Paper No.:	101	Tamás Hegedűs, Balazs Nemeth, Péter Gáspár	Control design framework for automated vehicles using an advanced feedback linearization
13:03-13:13	18:03-18:18	06:03-06:06	Paper No.:	132	Lu Xiong, zhiqiang fu, Dequan Zeng, Zixuan Qian, Bo Leng	A Path Planning and Tracking Framework Base on Model Predictive Control for Autonomous Vehicle Obstacle Avoidance
13:13-13:09	18:18-18:09	06:06-06:09	Paper No.:	71	Juliette Torinsson, Mats Jonasson, Bengt Jacobson, Derong Yang	Joint optimization of transmission and a control allocator to minimize power losses in electric vehicles
13:09-13:12	18:09-18:12	06:09-06:12	Paper No.:		EMPTY	
13:12-13:15	18:12-18:15	06:12-06:15	Paper No.:		EMPTY	

13:20- 14:00	18:20- 19:00	06:20- 07:00	Plenary session chair:		Dr. Hugues Chollet
			Plenary session moderator:		Velichko Andrey
			State-of-art paper 5:	Orlova, Anna; Titova, Tamila	Analysis of the “Dynamics of railway vehicles” research field development using scientometric approach

14:00-15:40	19:00-20:40	07:00-08:40	Rail 5.1 session topic:		Vehicle - Track Interaction	
			Rail 5.1 session chair:		Dr. Maksym Spiryagin	
			Rail 5.1 session moderators:		Dauksha Anfisa, Kabanova Anastasiia	
14:00-14:20	19:20-19:20	07:20-07:20	Paper No.:	239	Simon Iwnicki, Roger Goodall	The Impact of New Running Gear Technologies upon Vehicle-Track Interaction
14:20-14:40	19:20-19:40	07:20-07:40	Paper No.:	051	Anna Pichler, Josef Fuchs, Bernd Luber, Florian Semrad	Methodology to gain statistical insights into the effects of operating conditions on railway vehicle dynamics
14:40-15:00	19:40-20:00	07:40-08:00	Paper No.:	233	Pan Zhang, Chen Shen	Numerical and experimental investigation on vehicle-track high-frequency dynamic interaction via V-Track test rig
15:00-15:20	20:00-20:20	08:00-08:20	Paper No.:	042	Rohan Kulkarni, Anna De Rosa, Alireza Qazizadeh, Mats Berg, Egidio Di Gialleonardo, Allen Facchinetti, Stefano Bruni	Monitoring of lateral and cross level track geometry irregularities from onboard vehicle dynamics measurements using probabilistic fault classifiers
15:20-15:40	20:20-20:40	08:20-08:40	Paper No.:	127	Yuri Boronenko, Rustam Rahimov, Alexander Tretyakov, Maria Zimakova, Anton Petrov	Method of continuous registration of dynamic processes of interaction between rolling stock and railway track
15:40-17:20	20:40-22:20	08:40-10:20	Rail 5.2 session topic:		Wheel and Rail Contact, Adhesion, Damage	
			Rail 5.2 session chair:		Dr. Oldrich Polach	
			Rail 5.2 session moderators:		Dauksha Anfisa, Kabanova Anastasiia	
15:40-16:00	20:40-21:00	08:40-09:00	Paper No.:	061	Alexander Meierhofer, Gottfried Simon, David Simunek, Franz-Josef Weber, Klaus Six	Realistic worst-case adhesion characteristics causing maximum wheel-set axle vibrations
16:00-16:20	21:00-21:20	09:00-09:20	Paper No.:	225	Veronika Fedorova, Alina Saidova	Developing the wear resistant wheel profile for freight wagons with an axle load of 25 tf
16:20-16:40	21:20-21:40	09:20-09:40	Paper No.:	144	Aquib Qazi, Michel Sebès, Hugues Chollet, Honoré Yin, Cédric Pozzolini	An extension of FASTSIM for steady state non-Hertzian contact
16:40-17:00	21:40-22:00	09:40-10:00	Paper No.:	116	Lars-Ove Jönsson, Ingemar Persson	Gradient Index Profile, a novel idea for predicting equivalent conicity
17:00-17:20	22:00-22:20	10:00-10:20	Paper No.:	049	Yunguang Ye, Jonas Vuitton, Yu Sun, Markus Hecht	Wear concentration index: an alternative to the target T-gamma in railway wheel profile optimization

14:00-15:40	19:00-20:40	07:00-08:40	Rail 6.1 session topic:		Wheel and Rail Wear and Damage	
			Rail 6.1 session chair:		Dr. Colin Cole	
			Rail 6 session moderator:		Poliakov Boris	
14:00-14:20	19:00-19:20	07:00-07:20	Paper No.:	212	Chunyan He, Zhen Yang, Shaoguang Li, Meysam Naeimi	Numerical Study on the Generation Mechanisms of Wheel Polygonal Wear
14:20-14:40	19:20-19:40	07:20-07:40	Paper No.:	185	Binbin Liu, Stefano Bruni	Fast computation of wear distribution over contact patch
14:40-15:00	19:40-20:00	07:40-08:00	Paper No.:	054	Dietmar Hartwich, Gabor Mueller, Alexander Meierhofer, Danijel Obadic, Martin Rosenberger, Roger Lewis, Klaus Six	A fast, reliable and practical method to predict wheel profile evolution
15:00-15:20	20:00-20:20	08:00-08:20	Paper No.:	240	Shaoyao Chen, Carlos Casanueva, Saeed Hossein-Nia, Sebastian Stichel	Modified wear modelling for fast wear calculation
15:20-15:40	20:20-20:40	08:20-08:40	Paper No.:	203	Visakh V Krishna, Gerald Trummer, Saeed Hossein-Nia, Carlos Casanueva, Sebastian Stichel, Klaus Six	Rail RCF damage quantification: How do diverse approaches compare against one another?
15:40-17:20	20:40-22:20	08:40-10:20	Rail 6.2 session topic:		Vehicle and Track Models	
			Rail 6.2 session chair:		Dr. Nicholas Wilson	
15:40-16:00	20:40-21:00	08:40-09:00	Paper No.:	224	Peter Torstensson, Jens Nielsen, Michele Maglio, Emil Aggestam, Tomas Jerson, Mikael Ögren, Anders Genell	Rail acceleration induced by train pass-by – Field measurements and validation of a simulation model
16:00-16:20	21:00-21:20	09:00-09:20	Paper No.:	109	Taiwen You, Jinsong Zhou, Dao Gong, Yu Sun, Jiangxue Chen, Qiushi Wang, Tengfei Wang	Model updating of the flexible vehicle body using experiment modal parameters based frequency response function
16:20-16:40	21:20-21:40	09:20-09:40	Paper No.:	123	Yan Sun, Qing Wu, Maksym Spiryagin, Colin Cole	Methodology to Determine the Limits for Loading Distributions on A Wagon and A Consist of Wagons
16:40-17:00	21:40-22:00	09:40-10:00	Paper No.:	134	Yun Yang, Chengbiao Cai, Qinglie He, Shengyang Zhu	Optimization of the curving passing performance of the suspended monorail train based on the Surrogate mode
17:00-17:20	22:00-22:20	10:00-10:20	Paper No.:	090	Nishant Kumar, Claudia Kossmann, Stephan Scheriau, Klaus Six	A model for predicting the evolution of vertical vehicle-track interaction

14:00-15:40	19:00-20:40	07:00-08:40	Road 5.1 session topic:		Vehicle control, estimation, monitoring (1)	
			Road 5.1 session chair:		Dr. Tim Gordon	
			Road 5.1 session moderators:		Poliakova Ekaterina, Panchenko Maxim	
14:00-14:20	19:00-19:20	07:00-07:20	Paper No.:	025	Xun Shen, Pongsathorn Raksincharoensak	Vehicle Dynamics Control Strategy for a Sharp Curve with Road Friction Coefficient Change
14:20-14:40	19:20-19:40	07:20-07:40	Paper No.:	084	Wenliang Zhang, Lars Drugge, Mikael Nybacka, Zhenpo Wang, Junjun Zhu	Exploring model complexity for trajectory planning of autonomous vehicles in critical driving scenarios
14:40-15:00	19:40-20:00	07:40-08:00	Paper No.:	182	Gijs Campagne, Derong Yang	A Nonlinear Model Predictive Control based Evasive Manoeuvre Assist Function
15:00-15:20	20:00-20:20	08:00-08:20	Paper No.:	218	Viktar Beliautsou, Aleksandra Fedorova	Development of torque vectoring controller tuned with neuronal networks
15:20-15:40	20:20-20:40	08:20-08:40	Paper No.:	251	André Hartwecker, Steffen Müller, Christian Schyr	Safety of use analysis for autonomous driving functions under laboratory conditions
15:40-17:20	20:40-22:20	08:40-10:20	Road 5.2 session topic:		Vehicle control, estimation, monitoring (2)	
			Road 5.2 session chair:		Dr. Jochen Rauh	
			Road 5.2 session moderators:		Poliakova Ekaterina, Panchenko Maxim	
15:40-16:00	20:40-21:00	08:40-09:00	Paper No.:	062	Tommaso Chemello, Edoardo Sabbioni, Michele Vignati, Cornelia Lex	A fuzzy sensor fusion sideslip angle estimation algorithm combining inertial measurements with GPS data
16:00-16:20	21:00-21:20	09:00-09:20	Paper No.:	076	Feliciano Di Biase, Basilio Lenzo, Francesco Timpone, Xudong Zhang, Ye Zhuang	Vehicle sideslip angle estimation via Extended Kalman Filter and identification of tyre model parameters
16:20-16:40	21:20-21:40	09:20-09:40	Paper No.:	057	Máté Fazekas, Péter Gáspár, Balazs Nemeth	Calibration of front wheel odometry model
16:40-17:00	21:40-22:00	09:40-10:00	Paper No.:	169	Xiongshi Wang, Steffen Müller	Parameter Estimation of Vehicle Mass using Artificial Neural Network Algorithm
17:00-17:20	22:00-22:20	10:00-10:20	Paper No.:	230	Minglu Li	Enhanced safety and monitoring microprocessor concept for Steer-By-Wire system in autonomous vehicle

14:00-15:40	19:00-20:40	07:00-08:40	Road 6.1 session topic:		Motorcycles	
			Road 6.1 session chair:		Dr. Mehdi Ahmadian	
			Road 6.1 session moderators:		Gusev Artem, Velichko Andrey	
14:00-14:20	19:00-19:20	07:00-07:20	Paper No.:	020	Alexander Schramm, Luca Leonelli, Silvio Sorrentino	Motorcycle Driveline Stability in a Minimal Model Including Roll Angle During a Braking Maneuver
14:20-14:40	19:20-19:40	07:20-07:40	Paper No.:	027	Tetsunori Haraguchi, Tetsuya Kaneko, Ichiro Kageyama	Comparison of FWS and RWS for Personal Mobility Vehicle (PMV) with Active Tilting Mechanism on Obstacle Avoidance
14:40-15:00	19:40-20:00	07:40-08:00	Paper No.:	175	Ichiro Kageyama	Study on Concept Design for Two-wheeled Vehicle Handling from the Viewpoint of Tire Characteristics
15:00-15:20	20:00-20:20	08:00-08:20	Paper No.:	209	Florian Klinger, Manuel Klinger, Johannes Edelmann, Manfred Plöchl	Electric Scooter Dynamics – From a Vehicle Safety Perspective
15:20-15:40	20:20-20:40	08:20-08:40	Paper No.:	231	Federico Bonini, Gionata Manduchi, Nicolò Mancinelli, Alberto Martini	One-dimensional thermal model and temperature estimation for a MotoGP class motorcycle carbon brake
15:40-17:20	20:40-22:20	08:40-10:20	Road 6.2 session topic:		Electric vehicles; transmissions	
			Road 6.2 session chair:		Dr. Eric Tseng	
			Road 6.2 session moderators:		Gusev Artem, Velichko Andrey	
15:40-16:00	20:40-21:00	08:40-09:00	Paper No.:	040	Tobias Loss, Simon Peter, Armin Verhagen, Daniel Görges	Concepts for the enhancement of driving safety of electric vehicles without wheel individual rear axle brakes
16:00-16:20	21:00-21:20	09:00-09:20	Paper No.:	026	Vladimir Vantsevich, Jesse Paldan	A Generalized Approach to Virtual Driveline Systems for E-Vehicle Operation Improvements
16:20-16:40	21:20-21:40	09:20-09:40	Paper No.:	088	michele vignati, mattia belloni, edoardo sabbioni, davide tarsitano	A regenerative braking strategy for independently driven electric wheel accounting for contemporary use of electric and hydraulic brakes
16:40-17:00	21:40-22:00	09:40-10:00	Paper No.:	152	Mingzhi Lin, Tongli Lu	Modeling and Control Strategy Design for a Transmission System with Electric Disconnect Differential
17:00-17:20	22:00-22:20	10:00-10:20	Paper No.:		EMPTY	