
Target audience

The symposium addresses researchers and practitioners concerned with the manifold aspects of rail transport demand management and interested in discussing scientific and application-oriented approaches. Relevant disciplines are transport planning, railway engineering, information technology, economics, marketing, psychology and many others. Politicians, managers and representatives of public authorities are invited to benefit from the symposium as a platform for knowledge-exchange and transfer.

During the two-day symposium, distinguished speakers will address selected interdisciplinary topics in key notes. Designated innovative research and practice approaches will be presented in 15-minute talks. In addition, the best overall contributions to the symposium will be awarded as well as the best (post-)graduate student contribution. Furthermore, there is plenty of opportunity to network, especially at the symposium dinner which will be hosted at the end of the first symposium day.

Venue and Accommodation

The conference venue is the Maritim Konferenzhotel Darmstadt, centrally located at the main railway station.

The Maritim Konferenzhotel offers single bed rooms as well as double bed rooms.

Due to its central location you can also choose to stay in one of the other hotels located nearby:

B&B Hotel (350 m)

Zweifalltorweg 4, 64293 Darmstadt

Best Western Plus Plaza Hotel (400 m)

Am Kavalleriesand 6, 64293 Darmstadt

Intercity Hotel (550 m)

Poststraße 12, 64293 Darmstadt Kasinostraße 4, 64293 Darmstadt

Registration and Fees

Online registration for the RTDM 2018 is possible up to **October 15th, 2018** only through our website. The rates below, covering all expenses incl. taxes, apply:

Target Group	Regular	Late Bird
Students	150 €	200 €
Others	350 €	450 €

These rates do not include expenses for travel and accommodation.

The regular rate is available until **September 30th, 2018**. The late bird rate applies for registrations after this date and on site. For refunds before **September 30th, 2018** a fee of 85 € is charged. Please note that there will be no refunding for cancellations after **September 30th, 2018**. We accept payment by credit card and bank transfer.

Contact

Symposium on
Rail Transport Demand Management
RTDM 2018

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Symposium on Rail Transport Demand Management – RTDM 2018

Strategies, Methods and Digitalization across all Disziplines

October 24th – 25th, 2018
Darmstadt, Germany



PROGRAM



Innovations for Rail
Darmstädter Symposien zum Bahnverkehr



Scope and provisional Program

Efficient rail traffic management and high customer satisfaction do not only need an optimization of train operations but also a control of transport demand. Besides long-term and mid-term strategies to influence the demand, e.g. by ticketing and pricing strategies, also short-term measures are needed in cases of incidents to avoid overcrowded trains and to guide passengers towards the most suitable connection. The symposium addresses both, passenger and freight transport.

A visit to the EBD - Railway operation Research Centre is planned for Wednesday afternoon. The EBD - Railway operation Research Centre is a simulation facility which replicates the complexity of the rail industry – in infrastructure, operation and disposition – realistically on 500 m².

Time	Wednesday 24th Oct.	Thursday 25th Oct.	Time
09:00			09:00
09:15			09:15
09:30		Welcome	09:30
09:45		Invited Lecture 3 - Ralf Borndörfer	09:45
10:00			10:00
10:15	Check-In and Welcome Coffee	Session 3: Demand Control I	10:15
10:30			10:30
10:45			10:45
11:00	Symposium Opening	Coffee Break	11:00
11:15	Invited Lecture 1 – Christa Koenen		11:15
11:30		Session 4: Demand Control II	11:30
11:45	Invited Lecture 2 - Bhargab Maitra		11:45
12:00			12:00
12:15			12:15
12:30	Lunch-Break		12:30
12:45		Lunch Break	12:45
13:00			13:00
13:15		Session 5: Measures for Demand Control	13:15
13:30			13:30
13:45	Session 1: Transport Service Planning and Dispatching		13:45
14:00			14:00
14:15		Coffee Break	14:15
14:30			14:30
14:45			14:45
15:00	Coffee Break	Session 6: Reliability and Incident Management	15:00
15:15			15:15
15:30			15:30
15:45		Comprehensive Discussion & Research Needs	15:45
16:00	Session 2: Demand Estimation	Closing of the Symposium	16:00
16:15			16:15
16:30			16:30
16:45			16:45
17:00	Small Snacks		17:00
17:15			17:15
17:30			17:30
17:45			17:45
18:00	Technical Tour EBD		18:00
18:15			18:15
18:30			18:30
18:45			18:45
19:00			19:00
19:15			19:15
19:30			19:30
19:45			19:45
20:00	Conference Dinner		20:00
20:15			20:15
20:30			20:30
20:45			20:45
21:00			21:00

Invited Lectures

Christa Koenen

Chair of the Board of Managing Directors, DB Systel & CIO, DB Group

Prof. Dr. Bhargab Maitra

Professor in Civil Engineering, Indian Institute of Technology Kanpur

Prof. Dr. Ralf Borndörfer

Head of Department Mathematical Optimization, Zuse Institute Berlin

Sessions and Topics

Session 1: Transport Service Planning and Dispatching

Dispatch Optimization – Status of the Art, Impact in the Practice and Trends

Prof. Carlo Mannino, PhD Leonardo Lamorgese
SINTEF DIGITAL (Norway), OptRail (Italy)

Decision Support for Passenger-Oriented Train Disposition

Frank Berger, Ralf Rückert, Prof. Matthias Müller-Hannemann
Martin-Luther-Universität Halle-Wittenberg (Germany)

The Rolling Stock Rotation Planning Problem under Revenue Considerations

Boris Grimm, Prof. Ralf Borndörfer, Christof Schulz, PhD Steffen Weider
Zuse Institute Berlin (Germany), LBW Optimization GmbH (Germany)

An Incremental Model for Determining Railway Infrastructure Bottlenecks due to Strong Increases of Rail Freight Transport

Lars Kröger, PhD Christian Winkler
DLR Institute of Transport Research (Germany)

Exact Algorithms for LCL Network Planning under Consideration of Demand Fluctuation

Nicolas Kämmerling | TU Dortmund University (Germany)

Session 2: Demand Estimation

Efficient Monitoring of Public Transport Journeys

Felix Gündling, Prof. Karsten Weihe, Florian Hopp
TU Darmstadt (Germany)

The Ridership of Metro Networks: Analysis of some Explanatory Variables

Juan A. Mesa, Natividad González-Blanco, Prof. Federico Perea
University of Seville (Spain), Technical University of Valencia (Spain)

Micro Meets Macro: An Innovative Transport Model Architecture Aiming at Forecasting a Passenger Railway's Future

Patrick Buetzberger, Wolfgang Scherr | SBB AG (Switzerland)

Traffic demand and revenue control in public transport in an evolving metropolitan area

Prof. Thomas Winter, Prof. Robert Knappe, PhD Bernhard Luther, Prof. Nicola Winter, Irina Aßmann, PhD Anke Bytowski-Guerrier, Michael Pelligrini
Beuth Hochschule für Technik Berlin, HWR Berlin, Berliner Verkehrsbetriebe (Germany)

Sessions and Topics

Session 3: Demand Control I

Infrastructure - Design – Emotions

Dominic Hofmann | Frankfurt University of Applied Sciences (Germany)

Passenger Demand in a Technical World

Svenja Hainz, Elodie Vannier, PhD Michael Meyer zu Hoerste, PhD Ida Kristoffersson
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR) (Germany), VTI (Sweden), SNCF (France)

Session 4: Demand Control II

Dynamic Passenger Guidance in Rail Transport – Acceptance of Measures

Kim Gillich | TU Darmstadt (Germany)

Logistics 4.0 and Shift to Rail - Evolution Rather than Revolution

Yves Sterbak | Protostellar GmbH / Thales (Germany)

Situation- and Demand-Responsive Generation of Collective Passenger Information in Regional Trains

Tobias Monzert | TU Darmstadt (Germany)

Session 5: Measures for Demand Control

Towards Cost-Optimal Road Transports for Individual Passengers on Broken Itineraries

Igor Braun, Sebastian Fahnenreißer, Felix Gündling
TU Darmstadt (Germany)

Using Feeder Services with Autonomous Ridepooling Vehicles to Increase Rail Transport Demand

PhD Moritz von Möerner | TU Darmstadt (Germany)

Impact of Passenger Assistance Systems on the Performance of Urban Rail Networks

PhD Christian Meirich; Leander Flamm
Deutsches Zentrum für Luft- und Raumfahrt e.V. (Germany)

Session 6: Reliability and Incident Management

Valuing Passenger Risk of Missed Transfers in Rail Transportation

PhD Michael Bundschuh, PhD Klaus Noekel, Michael Lefeld, PhD Johannes Lieberherr
PTV AG (Germany), Deutsche Bahn AG (Germany), ttools GmbH (Switzerland)

On the Consistency of Timetable Evaluation Functions

Johann Hartleb, Prof. Markus Friedrich, Junior Prof. Marie Schmidt, Prof. Dennis Huisman
University of Stuttgart (Germany), Erasmus University Rotterdam (Netherlands)

Customer-oriented Design and Evaluation of Disruption Programs in Commuter Railway Transport

Anna-Katharina Brauner | TU Darmstadt (Germany)