## **Conference Announcement**





## International Railway Symposium Aachen

19. - 20. November 2025 Eurogress, Aachen

# IRSA2025

### Foreword

The challenges of climate change and the desired mobility transition are having a serious impact on the rail system from urban to international transport. Fortunately, demand for both passenger and freight transport is increasing in many countries. A number of rail networks are already reaching the limits of their capacity in some sections, often in the major hub areas. At the same time, infrastructure restrictions are increasingly occurring due to outdated installations and necessary construction works. If there are also restrictions on rolling stock or personnel, it is not surprising that delays in operation are on the order.

Many efforts are currently being made to make rail transport more attractive and resilient. Important topics here are digitalization and artificial intelligence, which will be increasingly used in rail transport in the coming years.

The 5th International Railway Symposium Aachen (IRSA25) at the Eurogress Aachen is the ideal forum for an intensive, international dialogue between experts on current issues, challenges and solutions in the field of rail transportation. Our event covers the entire technical range of the rail system, from infrastructure and operations to vehicle technology. With the symposium, the Research Center Railways of RWTH Aachen University would like to initiate a joint discussion with the sector from industry, science and authorities on current topics from research and practice. We are therefore issuing a call for papers to representatives from industry, associations, authorities and science to submit topics for our symposium. The event will be held in German and English in order to provide a forum for international speakers and guests.

T Kuhnimhof

Vills Viefe

Univ.-Prof. Dr-Ing. Tobias Kuhnimhof

Univ.-Prof. Dr.-Ing. Nils Nießen

Speaker of the organization team

#### Topics from all sectors of rail transport

- high speed, local/long-distance/regional and freight traffic
- trams, metros and suburban trains

#### Railway infrastructure management

- Asset management
- Failure process analysis and fault prevention
- Infrastructure quality

#### Innovative railway operation concepts

- Robust scheduling
- Mobility concepts
- Automatic track allocation
- Incident management

#### Safety, reliability and lifetime

- Structural integrity, collision safety
- Wheel-rail interaction, track guidance
- Train protection und railway signalling systems
- Predictive maintenance, maintenance management, diagnosis, spare parts management

#### Novel vehicles and components

- Vehicles
- Running gear
- Components

#### Assisted, automated and autonomous driving (3A)

- Automated freight transport
- Driver assistance systems
- Vehicle-to-X communication

#### Energy and resource efficiency

- Electrification, catenary-free operation
- Storage technologies
- Lightweight construction, additive manufacturing

#### Noise reduction

- Noise prevention, aerodynamics
- Vehicle noise reduction
- Infrastructure for noise protection measures

#### Mobility management:

- Increasing attractiveness
- Accessibility
- Pricing and tariff systems
- reactivations

### **Programme Committee**

#### International programme committee

- Prof. Dr.-Ing. D. Abel, RWTH Aachen University
- Dr. P. Berger, Knorr-Bremse SfS GmbH, Munich
- Dr.-Ing. A. Brockmeyer, Stadler Rail, Switzerland
- Dr. sc. ETH G. Caimi, SBB, Switzerland
- Prof. Dr.-Ing. M. Cichon, KIT, Karlsruhe
- Prof. Dr. ir. R. W. De Doncker, RWTH Aachen University
- Dr.-Ing. B. Dickenbrok, DB InfraGo AG, Frankfurt
- Prof. Dr.-Ing. M. Enning, FH Aachen
- Dr. C. Gralla, Scheidt & Bachmann, Mönchengladbach
- Prof. I. Hansen, TU Delft, Netherlands
- Dr.-Ing. M. Holzapfel, Schaeffler Technologies, Herzogenaurach
- Prof. Dr. T. Koseki, University Tokio, Japan
- Dr. rer. nat. A. Kuckelberg, quattron, Aachen
- Prof. Dr.-Ing. T. Kuhnimhof, RWTH Aachen University
- Dr.-Ing. P. Laumen, Scheidt & Bachmann, Mönchengladbach
- Dr.-Ing. L. Löwenstein, Siemens Mobility, Erlangen
- Dipl.-Ing. H. Mannsbarth, Alstom, Siegen
- Dr.-Ing. C. Meirich, DLR, Braunschweig
- Dr.-Ing. L. Müller, DB Systemtechnik, Minden
- Prof. Dr.-Ing. N. Nießen, RWTH Aachen University
- Dr.-Ing. M. Orth, DZSF, Dresden
- Prof. Dr.-Ing. R. Pfaff, FH Aachen
- Prof. J. Pombo, University of Huddersfield, UK
- Prof. Dr.rer.nat. D. U. Sauer, RWTH Aachen University
- Prof. Dr.-Ing. R. Schaal, TH Nürnberg
- Prof. Dr.-Ing. C. Schindler, RWTH Aachen University
- Prof. Dr.-Ing. B. Schmidt, FH Aachen
- PD Dr.-Ing. habil. L. Schnieder, ESE Braunschweig
- Prof. Dr.-Ing. C. Singer, TH Nürnberg
- Prof. S. Stichel, KTH Stockholm, Sweden
- Prof. Dr. N. Tomii, Chiba Inst. of Techn. Japan
- Prof. E. G. Vadillo, EHU Bilbao, Spain
- Prof. Dr.-Ing. H. Vallery, RWTH Aachen University
- Dr.-Ing. W. Weigand, ehem. DB Netz AG
- Prof. Dr.rer.nat N. Weik, TU Munich
- Dr. R. Zweigel, Rurtalbahn, Düren

## IRSA2025

## **Preliminary Programme/Organizers**

#### Wednesday, November 19, 2025

- 09.00 Registration
- 10.00 Official opening of the event
- 10.15 Welcome speeches Lecture sessions
- 17.30 End of lectures first day
- 19.00 Evening event

#### Thursday, November 20, 2025

- 09.00 Lecture sessions
- 15.00 End of the lecture event

#### Organizers

DVV Media Group | Eurailpress www.eurailpress.de/irsa2025

In cooperation with RWTH Aachen University and the following institutions:

- Institute of Rail Vehicles and Transport Systems (IFS), Head: Prof. Schindler
- Institute of Transport Science (VIA), Head: Prof. Nießen
- Institute of Urban and Transport Planning (ISB), Head: Prof. Kuhnimhof
- Institute for Power Electronics and Electrical Drives (ISEA), Head: Prof. De Doncker and Prof. Sauer
- Institute of Automatic Control (IRT), Head: Prof. Vallery







### **Event Information**

#### **Conference language**

The conference languages are German and English.

The conference lectures and the slides can be presented in both languages.

A simultaneous interpretation of the German lectures into English will be offered for international participants.

#### **Registration fees**

Contributors: 395,00€ + VAT **(evening event included)** 

Participants: 740,00€ + VAT **(evening event included)** 

Participants: 695,00€ + VAT **(evening event not included)** 

Would you like to purchase a **student ticket**\*? Then you will find all the information you need on our website.

\*without a Master's/Diploma degree

The conference fee covers participation in the conference programme and also catering.

Places for attendance are expected to be limited.

The travel und accommodation expenses shall be covered by the participants.

#### Contact

DVV Media Group Daniela Hennig Heidenkampsweg 75 20097 Hamburg Phone +49 40 23714 - 355 daniela.hennig@dvvmedia.com www.eurailpress.de/irsa2025



## **Submission of Papers**



Experts from universities and research institutions, from industry and politics are invited to take part in the conference and to submit presentation proposals addressing one of the topics listed on the reverse side.

#### Submission

Potential contributors are kindly asked to submit an extended abstract (max. three DIN A4 pages) on one of the main topics of the conference, either in German or in English, until April 07, 2025.

Please compose your document using the template available on the website of the symposium and submit it using the upload option:

www.eurailpress.de/irsa2025

#### Content of the extended abstract

- Classification regarding the topic
- Meaningful title
- Abstract (incl. keywords) at least one DIN A 4 page
- Personal data of the author(s) (name, address, position)
- Preferred language of presentation, name of lecturer

#### Registration

The registration for the conference will be possible online at:

#### www.eurailpress.de/irsa2025

Registration will open in July 2025.

#### Decision of the programme committee

The programme committee will decide on the acceptance of the submitted contributions as well as on their classification in the corresponding programme session. The programme committee has to make a selection because the number of lectures is limited due to time constraints

## Manuscripts, Dates and Sponsoring

#### Manuscript size

The authors are kindly asked to submit the accepted contributions in the form of a manuscript for the digital conference proceedings. The manuscript should be between 8-16 pages long and be submitted in either German or English.

#### Dates

Extended abstract submission:	April 07, 2025
Author notification:	May 16, 2025
Manuscript submission:	July 14, 2025

#### Sponsoring

An event like the IRSA relies on the support of economic and industrial associations.

We have prepared a special sponsorship programme for you as well. Please contact us if you are interested. Further information can be found at: www.eurailpress.de/irsa2025

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