

## Event Information

### Conference language

The conference languages are German and English.

The conference lectures and the slides can be presented in either language of both.

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

### Registration fees

Contributors:

early birds before Sept. 15, 2017: 280 €, after: 330 €

Participants:

early birds before Sept. 15, 2017: 480 €, after: 530 €

Students without a master's or Diploma degree\*:

early birds before Sept. 15, 2017: 150 €, after: 200 €

\* without conference dinner, proof required  
All prices include VAT

The registration fee includes admission to all conference sessions, catering, the conference dinner and all conference documents.

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

### Contact

Secretary's office of the IRSA 2017  
c/o Institute of Rail Vehicles  
and Transport Systems  
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## Call for 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 May 15, 2017.

Please compose your document using the template available on the website of the symposium and submit it using the upload option:  
[www.irsa.rwth-aachen.de](http://www.irsa.rwth-aachen.de)

### Content of the extended abstract

- Classification regarding the topic
- Meaningful title
- Abstract (incl. keywords)
- Personal data of the author(s) (name, address, position)
- Preferred language of presentation

### Registration

The registration for the conference will be possible online at:  
[www.irsa.rwth-aachen.de](http://www.irsa.rwth-aachen.de)  
Registration will open on May 1, 2017.

## Presentation of the Papers

The program committee will decide on the acceptance of the submitted contributions as well as on their classification in the corresponding program session. The contributions rejected by the committee can be accepted as poster presentations.

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.

### Deadlines

Extended abstract submission:	May 15, 2017
Author notification:	June 30, 2017
Manuscript submission:	Sept.15, 2017

### Sponsoring

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

We have prepared a special sponsorship program for you as well. Please contact us if you are interested. Further information can be found at:

[www.irsa.rwth-aachen.de](http://www.irsa.rwth-aachen.de)

## Conference Announcement Call for Papers



## 1<sup>st</sup> International Railway Symposium Aachen

28-30 November 2017  
at RWTH Aachen University

# IRSA 2017

## Foreword

Current trends, such as digital networking and urbanization, have created new opportunities for rail transport. The resulting challenges cannot be faced by a single domain alone. Innovative ideas that exploit the full potential of the railway system require interdisciplinary collaboration. Promising first steps have already been taken, for instance in the fields of automated driving and predictive maintenance. It is now time to maintain this momentum to shape the future of the rail transport together.

The 1<sup>st</sup> International Railway Symposium Aachen (IRSA) is meant to provide a platform for professional exchange in the sector. We attach much importance to covering a wide and interdisciplinary range of subjects including operation, infrastructure and vehicle technology. The symposium is equally interesting for scientists, professionals and politicians. Both the mainline transit and the urban transport are addressed. Last but not least, we want to facilitate networking among the participants.

As organizers of IRSA, we look forward to seeing you in Aachen. We make every effort to offer you an attractive programme and we kindly invite you to actively contribute interesting papers and presentations.



Univ.-Prof. Dr.-Ing. Christian Schindler  
Spokesman of the Organization Committee

## Target Groups and Topics

### Target groups

Technical experts and managers from the railway sector from science, economics and politics.

### Topics from all sectors of rail transport

#### *Innovative railway operation concepts*

- Robust scheduling
- Automatic track allocation
- Incident management

#### *Safety, reliability and service life*

- Structural integrity, collision safety
- Train protection und railway signalling systems
- Predictive maintenance, maintenance management, diagnosis, spare parts management

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

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

#### *Energy and resource efficiency*

- Innovative vehicle, running gear and drive train concepts
- Electrification, catenary-free operation
- Lightweight construction, additive manufacturing
- Wheel-rail interaction, track guidance

#### *Noise reduction*

- Noise prevention, aerodynamics
- Vehicle noise attenuation
- Infrastructure for noise protection measures
- Active and passive concepts

## Organizers

### Programme committee

- Prof. Dr.-Ing. D. Abel, RWTH Aachen University
- Dr.-Ing. T. Bölker, VIA Consulting & Develop., Aachen
- Prof. Dr.-Ing. T. Dellmann, RWTH Aachen University
- Prof. Dr. ir. R. W. De Doncker, RWTH Aachen Univ.
- Prof. Dr.-Ing. M. Enning, FH Aachen
- Dr. M. Feil, DB Netz AG
- Prof. Dr. Eng. J. A. Ferreira, TU Delft
- Prof. I. Hansen, TU Delft
- Prof. R. D. Lorenz, University of Wisconsin-Madison
- Dipl.-Ing. H.-P. Lang, DB Systemtechnik, Minden
- Dr.-Ing. L. Löwenstein, Siemens Mobility, Erlangen
- Prof. Dr.-Ing. A. Müller-Hellmann, RWTH Aachen Univ.
- Prof. Dr.-Ing. N. Nießen, RWTH Aachen University
- Prof. Dr.-Ing. R. Pfaff, FH Aachen
- Prof. Dr.-Ing. C. Schindler, RWTH Aachen University
- Prof. Dr.-Ing. B. Schmidt, FH Aachen
- Prof. S. Stichel, KTH Stockholm
- Prof. Dr.-Ing. D. Vallée, RWTH Aachen University
- Dr.-Ing. W. Weigand, ehem. DB Netz AG
- Prof. L. Zhang, Beijing Jiaotong University

### Organizers

Research Center Railways (RCR)

IRSA is an initiative of the following institutions of the RWTH Aachen University:

- Institute of Rail Vehicles and Transport Systems (IFS), Prof. Schindler
- Institute of Transport Science (VIA), Prof. Nießen
- Institute for Power Electronics and Electrical Drives (ISEA), Prof. De Doncker

[www.irsa.rwth-aachen.de](http://www.irsa.rwth-aachen.de)

## Preliminary Programme

### Tuesday, November 28, 2017

Individual Arrival

18.00 Reception and get-together including a visit to Aachen Cathedral and the Christmas market

### Wednesday, November 29, 2017

09.00 Registration

10.00 Official opening of the event at the SuperC building of the RWTH Aachen University

10.15 Welcome speeches  
Technical sessions

19.00 Conference dinner

### Thursday, November 30, 2017

09.00 Lecture sessions

15.30 Closing session

16.30 End of the event



# IRSA 2017