## **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:

early birds before Sept. 15, 2019: 300 €, after: 350 €

Participants:

early birds before Sept. 15, 2019: 500 €, after: 550 €

Students without a master's or Diploma degree\*: early birds before Sept. 15, 2019: 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 and accommodation expenses shall be covered by the participants.

#### Contact

Secretary's office of the IRSA 2019 c/o Institute of Transport Science Mies-van-der-Rohe-Straße 1 52074 Aachen, Germany

Tel. +49 241 80 25190 Fax. +49 241 80 22292

irsa@rwth-aachen.de

# **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 March 15, 2019. 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

### Content of the extended abstract

- Classification regarding the topic
- Meaningful title
- Abstract incl. keywords (at least one DIN A4 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.irsa.rwth-aachen.de

Registration will open on May 1, 2019.

# **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 program committee has to make a selection because the number of lectures is limited due to time constraints.

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: March 15, 2019
Author notification: April 30, 2019
Manuscript submission: June 30, 2019

## 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

## **Conference Announcement**

Call for Papers



# **2<sup>nd</sup> International Railway Symposium Aachen**

26-28 November 2019 RWTH Aachen University

# **2<sup>nd</sup> International Railway Symposium Aachen**

26-28 November 2019 RWTH Aachen University

IRSA2019 IRSA2019

## **Foreword**

The railway system is facing major challenges, but also new opportunities to increase its attractiveness. Nowadays, relevant topics are digitalization and automation. The complex system requires interdisciplinary research and cooperation in order to ensure competitiveness of the rail transport even in the future.

After the successful first International Railway Symposium 2017 with over 200 participants from 15 countries, IRSA 2019 takes place in Aachen from 26-28 November 2019. We - the Research Center Railways of RWTH Aachen University - aim to continue and intensify the discussion with the experts from industry, science and authorities about current railway topics from research and practice. The range of topics is broad and covers the entire railway system of infrastructure, vehicle technology and operation.

We cordially invite you to participate in the symposium and ask you to support us by enriching the symposium with an interesting submission. We look forward to lively and active discussions on the current topics in rail transport.

Univ.-Prof. Dr.-Ing. Nils Nießen Spokesman of the Organization Committee

Vils Viele

# **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

All kinds of rail systems: High speed passenger train, commuter rail as well as urban transport - light rail and metros - and cargo rail transport.

Railway infrastructure management

- Asset management
- Failure process analysis and fault prevention

Innovative railway operation concepts

- Robust schedulina
- Automatic track allocation
- Incident management

Safety, reliability and service life

- 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
- Car-to-X communication

Energy and resource efficiency

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

Noise reduction

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

# **Organizers**

## Program committee

- Prof. Dr.-Ing. D. Abel. RWTH Aachen University
- Dr.-Ing. T. Büker, VIA Consulting & Development, Aachen
- Dr. sc. ETH G. Caimi, SBB, Suisse
- Prof. Dr. ir. R. W. De Doncker. RWTH Aachen University
- Prof. Dr.-Ing. M. Enning, FH Aachen
- Prof. I. Hansen, TU Delft, Netherlands
- Dipl.-Ing. H. P. Lang, DB Systemtechnik, Minden (requested)
- Dr.-Ing. L. Löwenstein, Siemens Mobility, Erlangen
- Dipl.-Ing. H. Mannsbarth, Bombardier Transport, Siegen
- Prof. Dr.-Ing. A. Müller-Hellmann, RWTH Aachen University
- Prof. Dr.-Ing. N. Nießen, RWTH Aachen University
- Prof. Dr.-Ing. R. Pfaff, FH Aachen
- Dr.-Ing. A. Priebe, Scheidt & Bachmann, M'gladbach
- Prof. Dr.-Ing. C. Schindler, RWTH Aachen University
- Dipl.-Ing. Dr. techn. A. Starlinger, Stadler Altenrhein, Suisse
- Prof. Dr.-Ing. B. Schmidt. FH Aachen
- Prof. S. Stichel, KTH Stockholm, Sweden
- Prof. Dr. N. Tomii, Chiba Inst. of Technology, Japan
- Dr.-Ing. W. Weigand, former DB Netz AG

#### **Organizers**

Research Center Railways (RCR) www.rcr.rwth-aachen.de

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

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

Contact: www.irsa.rwth-aachen.de

# **Preliminary Program**

## Tuesday, November 26, 2019

Individual Arrival

18.00 Reception and get-together at the SuperC building of the **RWTH Aachen University** 

### Wednesday, November 27, 2019

09.00 Registration

- 10.00 Official opening of the event at Eurogress Aachen
- 10.15 Welcome speeches Lecture sessions
- 19.00 Conference dinner in former tram depot

## Thursday, November 28, 2019

09.00 Lecture sessions

15.30 Closing session

16.30 End of the event





