

Registration

Registration at www.rhf-germany.de.

Workshop fee

The registration is free of charge.

Further Information

The conference language will be English.

We will be using Zoom for the online meeting.

Introduction

In a time, where digitalisation and automatization is on everyone's mind, it becomes even more urgent to keep the human in the loop. Requirements and tasks are changing and impose new challenges on the work force. These need to be addressed. Rail human factors deals with the question how to incorporate the human in today's railway system as well as the system of the future.

The fourth German workshop on Rail Human Factors will offer an opportunity to meet with national and international experts in the fields of railway research and human factors.

The workshop consists of presentations and lots of time for discussions.

Organizing Committee

Prof. Dr. Birgit Milius (TU Berlin)

Dr. Anja Naumann (German Aerospace Center)

Program Committee

Prof. Dr. Martin Baumann (Universität Ulm)

Dipl.-Inf. Marc Burkhardt (Siemens Mobility GmbH)

Prof. Dr. Dietrich Manzey (TU Berlin)

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Prof. Dr. Birgit Milius (TU Berlin)

Dr. Anja Naumann (German Aerospace Center)

Prof. Dr. Jörn Pacht (TU Braunschweig)

Prof. Dr. Katharina Seifert (German Aerospace Center)



4th German Workshop on Rail Human Factors

Online with Zoom

December, 2nd, 2020

www.rhf-germany.de

organized by:

bbi 
Bahnbetrieb & Infrastruktur
Eisenbahn-Betriebs- & Experimentierfeld


DLR **Deutsches Zentrum
für Luft- und Raumfahrt**
German Aerospace Center

ITS  mobility

Wednesday, December 2nd, 2020

08:45 **Dial-in**

09:00 **Welcome note**

Katharina Seifert (German Aerospace Center)

Birgit Milius (TU Berlin)

Anja Naumann (German Aerospace Center)

Automation/ Train Control Systems

Chair: Anja Naumann (German Aerospace Center)

09:10 **A prototype to develop and evaluate remote control workplaces for future automated railway operation**

*Niels Brandenburger, Anja Naumann
(German Aerospace Center)*

09:30 **Creating driver-vehicle collaboration in autonomous environments: Siemens Autonomous Tram**

*Sabine Berghaus, Philipp Quaet-Faslem, Kristian Weiss
(Siemens Mobility/Siemens AG)*

09:50 **Remote driving options as a fallback system for automated trains**

Baris Cogan, Birgit Milius, Heiko Herholz (TU Berlin)

10:10 **Questions & Answers**

10:25 **Coffee break + Discussion I**

Ergonomics and Usability of advisory and assistance systems

Chair: Birgit Milius (TU Berlin)

10:55 **Reducing Monotony in Rail Signaling by Secondary Tasks with Various Levels of Difficulty – An Experimental Study**

*Jonas Brünegger, Mario Niederhauser, Michaela Wirth,
Josua Peter, Tanja Huber (University of Applied
Sciences Northwestern Switzerland)*

11:15 **Use of modern communication devices in the train driver's cab – risks and design options**

*Nicole Stoller, Giulio Nisoli, Jonas Brünegger,
Stefan Wahrstätter, Melisa Dittrich, Karin Hostettler,
Katrin Fischer (University of Applied Sciences
Northwestern Switzerland)*

11:35 **The development of a joint cognitive system of train driver and ATO GoA2 at Netherlands Railways**

*Inge van Kooten-Satter, Vera Verstappen, Stan Albers,
Lammert Visser, Ellen Dircks (Netherlands Railways)*

11:55 **Questions & Answers**

12:10 **Lunch break**

Human Factors Integration/ Rules and Standards I

Chair: Anja Naumann (German Aerospace Center)

12:45 **Is a train coming? – Effects of two low-cost safety measures on road user behavior at a passive level crossing**

*Annika Dreßler, Joana Illgen, Jan Daniel Grippenkoven
(German Aerospace Center)*

13:05 **Developing trainings to improve cognitive skills of technical operator in the railway domain**

*Stefan Wahrstätter, Jonas Brünegger, Nicole Stoller, Giulio
Nisoli, Karin Hostettler, Katrin Fischer (University of
Applied Sciences and Arts Northwestern Switzerland)*

13:25 **Integration of UX into CENELEC 50128 based processes**

Marc Burkhardt (Siemens Mobility GmbH)

13:45 **Questions & Answers**

14:00 **Coffee break + Discussion II**

Human Factors Integration/ Rules and Standards II

Chair: Birgit Milius (TU Berlin)

14:30 **Good Rules**

*Giulio Nisoli, Nicole Stoller, Stefan Wahrstätter,
Karin Hostettler, Katrin Fischer (University of Applied
Sciences Northwestern Switzerland)*

14:50 **ERA Safety Culture Programme**

Bart Accou (European Union Agency for Railways)

15:10 **What role for the EU regulator as regards Human and Organisational Factors (HOF) in railway automation?**

Jayne Yeo (European Union Agency for Railways)

15:30 **Questions & Answers**

15:45 **Conclusion and Farewell**

Anja Naumann (German Aerospace Center)

Birgit Milius (TU Berlin)

16:00 **End of Workshop**

Agenda is subject to change