Objectives
Human factors in railways is a topic that becomes more and more important. So far, changes to the railway system were driven by technical developments with the human acting as back up. However, little thought was given if and how humans can best fulfill their new role.

In other European countries, especially Great Britain and the Scandinavian countries, rail human factors research is well established. Unfortunately, due to the diverse nature of the railways systems with e.g. its different operational rules and safety culture, a simple transfer of their research results is not possible. Rail human factors research in Germany is so far very limited. With this workshop we hope to help raising awareness for the importance of rail human factors, and want to trigger new research in this area in Germany especially within the community of railway research as we are convinced that only with a strong background in railways best results will be obtained.

Organizing Committee
Dr. Birgit Milius (Siemens AG)
Dr. Anja Naumann (German Aerospace Center)

Program Committee
Prof. Dr. Martin Baumann (Universität Ulm)
Dipl.-Inf. Marc Burkhardt (Siemens AG)
Prof. Dr. Karsten Lemmer (German Aerospace Center)
Prof. Dr. Dietrich Manzey (TU Berlin)
Prof. Dr. Ullrich Martin (Universität Stuttgart)
Dr. Birgit Milius (Siemens AG)
Dr. Anja Naumann (German Aerospace Center)
Prof. Dr. Jörn Pachi (TU Braunschweig)

Registration
Registration at www.rhf-germany.de.

Conference Fee (excl. VAT):
- Participant: 400 €
- Presenting author: 200 €

Media Partner
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Tuesday, April 17th, 2018

09:00  Registration & Coffee
09:45  Opening
   Meike Jipp (German Aerospace Center)
10:00  Keynote
   Implementing a just culture in railway: why and how?
   Christian Neveu
   (SNCF/ Chairman UIC Human Factors Working Group)

Human Factors and Safety (I)
   Chair: Anja Naumann (German Aerospace Center)
11:00  SAFER-LC: Level Crossing Design Meets Traffic Psychology
   Jan Grippenkoven, Annika Dreller
   (German Aerospace Center)
11:30  Stepstones for Safety Culture & Human Factors in a Rule based Industry
   Ole Kroczek (DB Regio AG)
12:00  Lunch break
13:00  Poster Session

Human Factors and Safety (II)
   Chair: Jan Grippenkoven (German Aerospace Center)
13:45  ERA's Safety Culture Programme: Several Initiatives to Promote a Positive Safety Culture Across European Railways
   Grégory Rolina
   (European Union Agency for Railways)
14:15  Integration of HF into an Existing Global R&D Product and System Development Process
   Suzanne Heape
   (Siemens Rail Automation Holdings Ltd.)
14:45  Derivation of generic rules for traffic control systems through comparison of safety regulations across all transport modes
   Dirk Bruckmann (Rhine-Waal University of Applied Sciences), Anuradha Jain (Partner for Projects and Studies, Logistics-Transport-Energy)

15:15  Coffee break

Fatigue, monotony, mental workload (I)
   Chair: Anja Naumann (German Aerospace Center)
15:45  Automation in Railway Operations: Effects on Signaler and Train Driver Workload
   Niels Brandenburger, Birte Thomas-Friedrich, Anja Naumann, Jan Grippenkoven (German Aerospace Center)
16:15  Two Factors Causing Monotony in Rail Signaling
   Jonas Brünger, Katrin Fischer (University of Applied Sciences and Arts Northwestern Switzerland)
18:30  Evening Reception in
   Dean’s Nightbar
   21:30  Südstraße 31
   38100 Braunschweig

Wednesday, April 18th, 2018

08:15  Registration & Coffee
08:45  Opening
   Jörn Pachl (TU Braunschweig)
09:00  Keynote
   Selling, implementing and sustaining Human Factors in an ever-changing Rail environment
   Richard van der Weide (INTERGO bv)
10:00  Coffee break

Human Factors Influencing Design
   Chair: Jörn Pachl (TU Braunschweig)
10:30  Usability Study: Smart watch in railway enviroment
   Marc Burkhardt, Daniel Bruns, Luise Dingelstedt, Elke Grabe, Nadine Ruth (Siemens AG)
11:00  Optimizing Rail Signaler Disruption Management in the German Railway System
   Birte Thomas-Friedrich (German Aerospace Center), Raimo Michaelsen (University of Applied Sciences Erfurt), Jan Grippenkoven (German Aerospace Center)
11:30  Ethnographic Analysis of the Dispatchers’ Workplace in a Rail-Based Transport Control Center
   Ullrich Martin, Carlo von Molo, Niels Henze, Lars Lischke, Sven Mayer (University of Stuttgart), Monika Rieger, Benjamin Steinhilber, Florestan Wagenblast (University of Tuebingen)
12:00  Lunch break

Fatigue, monotony, mental workload (II)
   Chair: Birgit Milius (Siemens AG)
13:00  Proposals for measures dealing with fatigue in workplaces in safety-critical areas within the railway sector
   Frank Michelberger, Gernot Rottermanner
   (St. Pölten University of Applied Sciences)
13:30  Reaction to unexpected emergency situation in automated driving
   Wolf Dietrich Zuzan (Free lance psychologist)
14:00  Final Remarks & Closing
   Birgit Milius (Siemens AG), Anja Naumann (German Aerospace Center)
14:15  Technical Visits (registration mandatory)
   • German Aerospace Center (DLR)
     - Railway system laboratory
   • Siemens AG
     - Test center for Operation Control Systems, Train control and Cab Simulation
   • TU Braunschweig
     - Virtual railway operations laboratory
17:15  End of technical visits
   (latest)

Program is subject to change