Venue

Haus der Wissenschaften
Pockelsstraße 11
38106 Braunschweig
Germany

Program Committee

Prof. Dr. Karsten Lemmer (DLR)
Prof. Dr. Dietrich Manzey (TU Berlin)
Prof. Dr. Ulrich Martin (TU Stuttgart)
Dr. Birgit Milius (TU Braunschweig)
Dr. Anja Naumann (DLR)
Prof. Dr. Jörn Pachl (TU Braunschweig)
Dipl.-Des. (FH) Kim-Markus Rosenthal (Siemens AG)
Prof. Dr. Hartmut Wandke (HU Berlin)

Conference Fee (including VAT):

- Participant: 275 €
- Presenting author: free of charge

I hereby register as

- [ ] Participant
- [ ] Presenting author

Last Name _______________________________________
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Cancellation: Participation may be canceled free of charge up to 21 days before the event commences. 50% of the attendance fee will be charged for cancellations received after this time. We will charge the full attendance fee for any participation canceled on the actual day of the event. Cancellation must be made in writing by e-mail to info@its-nds.de or fax + 49 531 35406-74.

Event cancellation and changes: The organizer shall be entitled to cancel an event without stating reasons. In this case, the full attendance fee will be reimbursed. No further claims may be made. The organizer reserves the right to change the conference program provided such does not affect the event’s overall character.

First German Workshop on Rail Human Factors

Program

May, 20th and 21st, 2014
Haus der Wissenschaft, Braunschweig, Germany

www.rhf-germany.de
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 raise awareness to 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.

Evening Reception

Visits will show the laboratory RailSiTe® of the DLR which is designed for functional testing of Train Control Systems as well as for studies on innovative human machine interfaces and assistance systems.

Tuesday, May 20, 2014

12:00 Registration
12:45 Opening
  Prof. Dr. Karsten Lemmer (German Aerospace Center)
  Prof. Dr. Jörn Pachl (Technische Universität Braunschweig)
13:00 Keynote: Human Factors in Train Traffic Control: Automation, System Awareness and Design of Operator Interfaces
  Bengt Sandblad (Dept. of Information Technology, Uppsala University)

Session 1

14:00 Human-Machine Interaction in the Swiss Federal Railways: Anticipating Consequences of Automation on Signalling and Train Dispatching
  Jonas Brüngger (Fachhochschule Nordwestschweiz)
14:30 Issues in interaction Designs of Train Protection Systems: the Need to (Re-)Direct Attention towards Signals
  Sonja Giesemann (German Aerospace Center)
15:00 Coffee Break

Session 2

15:30 Development of Train Driver Advisory Systems
  Simon Tschirner (Uppsala University)
16:00 LEADER – Driver Advisory Systems and the Human Factor
  Manfred Walter (Knorr-Bremse Systeme für Schienenfahrzeuge GmbH)
16:30 Application of Simulators to Investigate Complex Interactions at the Human Machine Interface of Railway Systems
  Jürg Suter
17:00 Usability Engineering in the Rail Sector: Creating a Virtual Learning Environment for Rail Traffic Controllers
  Sandra Dietsch (German Aerospace Center)

17:30 Transfer to the German Aerospace Center
18:00 Dinner Buffet and Visits to the Railway Systems Research Laboratory at the German Aerospace Center

Wednesday, March 21, 2014

8:00 Registration
08:30 Keynote: Importance of Identifying and then Including Representative Users Throughout Design
  Suzanne Heape (Siemens AG)

Session 3

09:30 Are Signalmen a Safety Risk in Railway Systems?
  Jörg Demitz (Schienenverkehr System Technik GmbH)
10:00 The Impact of the Historical Development of the Traffic Controller’s Workplace on Situation Awareness
  Tobias Lindner (Technische Universität Braunschweig)
10:30 Coffee Break

Session 4

11:30 Rail HF Research – An Overview
  Ann Mills (Rail Safety and Standards Board)
12:00 Reflections on Human Factors, ERMTS and Automatic Train Operation
  Susan Reinerz (European Railway Agency)
12:30 Safety Assessment of Z-Shaped Level Crossings for Urban Systems (With Consideration of User Behavior)
  Zifu Chu (University of Stuttgart)
13:00 Final Remarks & Closing