Division: Transport Planning and Technology of Transport Systems

Integrated Transport Planning

Prof. Dr.-Ing. Christine Ahrend
Office: SG 4, Building SG 4.1, Room 409
Salzufer 17-19, D-10587 Berlin
Tel.: +49 30 314-25145, Fax: +49 30 314-27875
www.verkehrsplanung.tu-berlin.de
E-Mail: sekretariat@verkehrsplanung.tu-berlin.de

- Interdependencies between Traffic, Regional Structure, Environment, Technology, Economics and Society
- Futurology and Strategies
- Mobility Patterns and Routines
- Empirical Mobility Research
- Transport and Mobility in International Context
- Evaluation of Transport Programmes and Measures

Track and Railway Operations

Prof. Dr.-Ing. habil. Jürgen Siegmann
Office: SG 18, Building SG 12, Room 310
Salzufer 17-19, D-10587 Berlin
Tel.: +49 30 314-23314, Fax: +49 30 314-25530
www.railways.tu-berlin.de
E-Mail: sekretariat@railways.tu-berlin.de

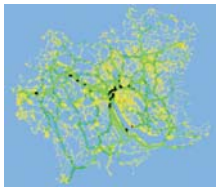
- Testing and analysing of railway infrastructure and vehicle components
- Optimisation of railway operations
- Strategic analyses concerning the optimization track systems
- Strategic analyses concerning the optimization of track systems:
  - Freight transportation
  - Regional rail transportation & intercity transportation
  - Public transport

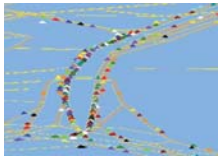
www.verkehr.tu-berlin.de

Transport Systems' Planning and Transport Telematics

Prof. Dr. Kai Nagel
Office: SG 12, Building SG 12, 2. OG.
Salzufer 17-19, D-10587 Berlin
Tel.: +49 30 314-23308, Fax: +49 30 314-26269
www.vsp.tu-berlin.de
E-Mail: sekretariat@vsp.tu-berlin.de

- Multi-modal modelling, simulation, and forecasting of transport systems (4-step-process, activity-based demand generation, multi-agent-simulations)
- Multi-modal transport systems analysis
- Transport telematics
- Transport informatics (algorithms and methods in particular for large transport systems)





Planning and Operation of Roads

Prof. Dr.-Ing. Thomas Richter
Office: TIB 3/3-3, Room 304
Gustav-Meyer-Allee 25, D-13355 Berlin
Tel.: +49 30 314-72421, Fax: +49 30 314-72884
www.strassenplanung.tu-berlin.de
E-Mail: spb@ils.tu-berlin.de

- Urban development and road traffic planning
- Intermodal planning of transport networks
- Design of urban roads
- Design of rural roads and motorways
- Immission control
- Traffic safety research
- Traffic management systems / intelligent traffic systems

Transportation Seminar

Prof. Dr.-Ing. Thomas Richter (speaker)
Office: SG 21, Building SG 4.1, 5th floor
Salzufer 17-19, D-10587 Berlin
Tel.: +49 30 314-79766, Fax:+49 30 314-25843
www.vwsem.tu-berlin.de
E-Mail: sekretariat@vwsem.tu-berlin.de

- Intermodal consideration of transport systems
- Coordination and moderation of interdisciplinary workgroups
- Project management / teambuilding

Division: Automotive Engineering and Internal Combustion Engines

Automotive Engineering

Prof. Dr. rer. nat. Volker Schindler
Office: TIB 13, Room 343
Gustav-Meyer-Allee 25, D-13355 Berlin
Tel.: +49 30 314-72971, Fax: +49 30 314-72505
www.kfz.tu-berlin.de
E-Mail: info@kfz.tu-berlin.de

- Vehicle concepts with conventional and alternative drive systems
- Vehicle safety with a focus on:
  - Child safety
  - Compatibility
  - Pedestrian safety
  - Small vehicle safety, two-wheeler safety
  - Optimisation of road accident rescue
  - Biomechanics
  - Crash testing and numerical simulation
- Energy and resource management with main focus on:
  - Energy management in vehicles
  - Electromobility, use patterns for vehicles with electric drive trains, vehicle-to-grid
- Development methods in the automotive industry:
  - Project management and quality methods
  - Computational design and simulation tools

Rail Vehicles

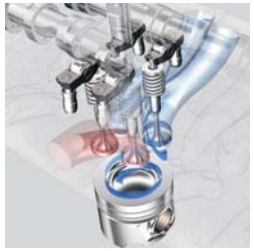
Prof. Dr.-Ing. Markus Hecht
Office: SG 14, Building SG 12, Room 401
Salzufer 17-19, D-10587 Berlin
Tel.: +49 30 314-25150, Fax: +49 30 314-22529
www.tu-berlin.de/~schienenfahrzeuge
E-Mail: markus.hecht@tu-berlin.de

- Running gears
  - Multi body systems simulation
  - Diagnosis systems for freight cars
  - Optimization of running gears
- Noise reduction
  - Noise analysis and low noise construction
  - Prediction of noise by calculation inside and outside
- Passive safety
  - Vehicle structures and inside design
  - Tank car safety

Internal Combustion Engines

Prof. Dr.-Ing. Roland Baar
Office: CAR-B1, Room ground floor 030
Carnotstr. 1A, D-10587 Berlin
Tel.: +49 30 314-26946, Fax: +49 30 314-26105
www.vkm.tu-berlin.de
E-Mail: vkm@tu-berlin.de

- Concepts of modern combustion engines regarding efficiency, emissions, power, drivability and costs
- Thermodynamic and fluiddynamic investigations in experiment and simulation
  - engine process
  - turbocharging / downsizing
  - fuels
  - mixing / combustion
- Test equipment for engines, turbochargers, components, measurement technology for combustion engines



Electric Railway Systems

Prof. Dr.-Ing. Peter Mnich
Office: CAR 6, Room 102
Carnotstr. 6, D-10587 Berlin
Tel.: +49 30 314-23531, Fax: +49 30 39992491
www.bahnsysteme.tu-berlin.de
E-Mail: mn@bahntechnik.de

- Advanced railway systems and techniques
- Maglev technologies and linear traffic
- High speed rail traffic
- Traction power supply and simulation
- Vehicle power supply
- Power rating and energy consumption of railway systems
- Automatic railway operation
- Evalution of railway systems: Planning, technologies, economic analysis, environment

updated: January 2011

Institute of Land and Sea Transport Systems (ILS)

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Vice Executive Director: Prof. Dr.-Ing. Thomas Richter
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Sekr. SG 10, Builing SG 12, 1st floor, Tel. +49 30 314-24997, Fax +49 30 314-26883,
www.move-it.tu-berlin.de, E-Mail: b.kaether@move-it.tu-berlin.de

ILS is one of 7 institutes of Faculty V, Mechanical Engineering and Transport Systems, Technische Universität Berlin, www.vm.tu-berlin.de

Division of Naval Architecture and Ocean Engineering

www.marsys.tu-berlin.de
Office: Kornelia Tietze, SG 17, E-Mail: kornelia.tietze@naoe.tu-berlin.de

Design and Operation of Maritime Systems

Prof. Dr.-Ing. Gerd Holbach
Building SG 1, Room 306
Tel.: +49 30 314-21417, Fax: +49 30 314-78969
Office: SG 6 (Tel.: +49 30 314-21213)
E-Mail: holbach@naoe.tu-berlin.de

- Ship design
  - integrated design
  - general arrangement
  - design methodology
  - Computer Aided Design

- Outfitting and accommodation
  - Accommodation layout
  - Cargo handling and stowage
  - Ship operation
- Safety and security on board and at harbor
- Construction and acoustics
- Management of single- and major projects
- Maritime transport
  - Seatrade / Cargoflow
  - Maritime transportsystems
  - Transportchains

Dynamics of Maritime Systems

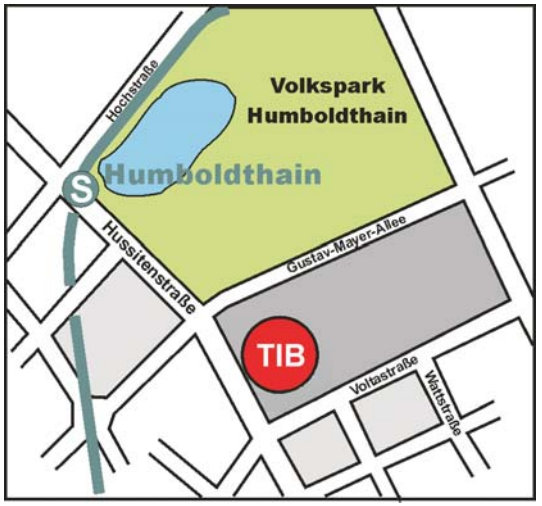
Prof. Dr.-Ing. Andrés Cura Hochbaum
Building SG 1, Room 205
Tel.: +49 30 314-26010, Fax: +49 30 314-22885
Office: SG 17 (Tel.: +49 30 314-24657)
E-Mail: cura@tu-berlin.de

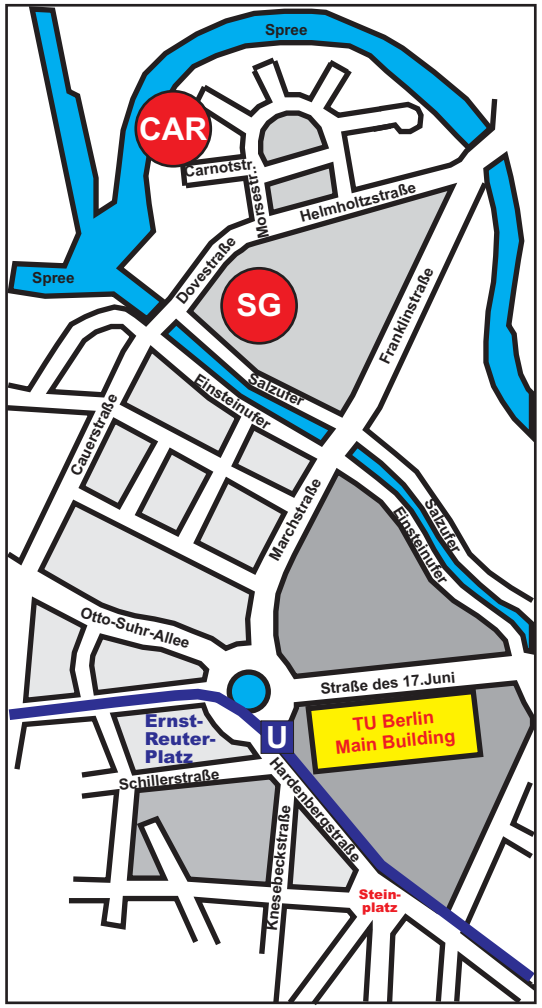
- Resistance and propulsion
- Manoeuvering
- Seakeeping of maritime systems

- Cavitation
- Motion and Flow Simulation
- Aero- and hydrodynamics of sailing vessels
- Design of offshore structures
- Seakeeping tests
- Offshore-technology
- Deep sea systems
- Oil recovery vessels

Research Field Ocean Engineering:

Prof. em. Dr.-Ing. Günther Clauss
Building SG 1, Room 402, Tel.: +49 30 314-23105, Fax: +49 30 314-22885
E-Mail: clauss@naoe.tu-berlin.de





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