Roland Bless – Research Interests

- Assistant professor @ Institute of Telematics (Group of Martina Zitterbart), CS, Karlsruhe Institute of Technology (KIT)
- IETF/IRTF: DiffServ (Lower Effort), NSIS, P2PSIP, RRG, TSVWG, ANIMA, RTGWG, NMRG, PANRG
- Current research interests:
  - Routing
  - Congestion Control
  - Energy Packet-based Grid
  - Quantum Communications
Viewpoint:
- need more autonomic operations for increasingly complex communication networks
- need a resilient foundation for controllability (zero-touch → no dependencies)

Research Questions:
- What is a minimal set of basic control plane functionality?
  - Simplification + Flexibility (easy software updates, CI/CD)
- Contradiction: Zero-touch + Security?
- Enabler for energy-awareness and energy savings?
- Can it facilitate Internet deployment (Internet access for all)?
- Interactions between multi-path routing and multi-path transport?