TU Darmstadt | SFB 1053 | Rundeturmstr.10 | 64283 Darmstadt

TECHNISCHE UNIVERSITÄT DARMSTADT

Fact Sheet

Designing the Future Internet

The CRC 1053 MAKI researches for a stable Internet

As of January 1st, 2013, the German Research Foundation (DFG) has approved the collaborative research center (CRC) 1053 “MAKI - Multi-Mechanisms-Adaptation for the Future Internet”. Initially, the CRC was funded with 8 Million Euros over the first four years. In November 2016 the DFG approved a second funding period. The CRC will be funded as of January 1st, 2017, over the next four years with 11 Million Euros.

MAKI creates an innovative premise for communication systems in the future. Its aim is to be more adaptive to changes, particularly during ongoing operations. For instance, this could facilitate the ability to stream a video on a smartphone in high-quality and without interruptions in spite of busy or overloaded mobile networks. Users could rely on a steady and reliable reception even when attending festivals or crowded sporting events.

The Internet has vastly evolved into an integral part of our everyday life. Consequently, the necessary communication mechanisms and equipment are changing on a constant basis. The individual solutions related to this rapid evolution are widely considered as problematic. Currently, as many as three standards exist for Wireless Connections: Bluetooth, Wi-Fi, and now LTE alone. The result: a multitude of services, often based on different technologies. MAKI considers this diversity as an opportunity by optimizing the individual attributes of particular mechanisms to meet the desired quality objectives.

MAKI is the first CRC of its kind in the field of information technology and computer science at TU Darmstadt. In CRC 1053, engineers and computer scientists are concerned with the issue of “Mechanisms for the Future Internet”.
A total of 10 departments of the TU Darmstadt work in collaboration. These include five departments from the area of Computer Science, five from the area of Electrical Engineering and information Technology. In addition, a research group from the University of Illinois at Urbana-Champaign as well as a department of the RWTH Aachen, a department of the J.-W.-Goethe University Frankfurt in the area law and economics, a department of the University Mannheim and a department at BTU Cottbus - Senftenberg are participating in the CRC. Their collaboration ensures extensive and comprehensive expertise in the research of communication mechanisms.
Chairman and coordinator of the CRC 1053 is Prof. Dr.-Ing. Ralf Steinmetz, head of the Multimedia Communications Lab at TU Darmstadt.

Scientific Contact (Management):
Dr. Michaela Bock, Tel: +49 6151 16 21022, gf@maki.tu-darmstadt.de

Organisation Contact:
Julia Müller, Tel: +49 6151 16 21020, office@maki.tu-darmstadt.de

Additional Information: www.maki.tu-darmstadt.de