

Pressemitteilung

Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau

Melanie Löw

15.04.2024

<http://idw-online.de/de/news831886>

Forschungs- / Wissenstransfer, Forschungsprojekte
Elektrotechnik, Informationstechnik
überregional



Hannover Messe 2024: 6G technology on its way to practical application – platform brings together research activities

The next generation of the 6G mobile communications standard is essential to drive digitalisation forward. Various universities and research institutions in Germany are researching this topic. The focus is on 6G standards and processes, data security, highly reliable data transmission, network availability and new computer networks, for example. This work is being brought together in a 6G platform, which is being coordinated by Professor Dr Hans Schotten and his team at the University of Kaiserslautern-Landau (RPTU). They will be presenting the platform and their work at the Hannover Messe from 22 to 26 April (stand Ho6, hall 14).

Biosensors in personalised medicine, personal avatars for protection in road traffic or as support in the world of work, for example, could be used in the future on the basis of 6G technology. But 6G is also likely to play a key role in the realisation of climate targets.

“To bring together 6G research more effectively, we are working closely together within the platform,” says coordinator Professor Dr Hans Schotten, who heads the Institute of Radio Communication and Navigation at the University Kaiserslautern-Landau and the Intelligent Networks research department at the German Research Center for Artificial Intelligence (DFKI). “Our goals include improving cooperation with international partners, creating an innovation network for small and medium-sized companies and start-ups and training specialists who are familiar with the technology.”

Among other things, it is important that the technology functions safely and reliably. In this context, energy efficiency and sustainability are also important. Artificial intelligence, microelectronics, quantum technologies and digital twins, for example, are used to develop the new methods.

In Germany, there are four large 6G research networks, known as hubs (Open6GHub, 6G-RIC, 6GEM and 6G-Life), and 18 6G projects involving partners from industry. There are also three AI-NET projects, which focus on automated, resilient and secure networks, and seven projects that deal with the resilience, meaning the reliability, of such networks. All of this work is being brought together in the 6G platform. This “Platform for Future Communication Technologies and 6G” is funded by the Federal Ministry of Education and Research (BMBF). The project is coordinated by the University Kaiserslautern-Landau (Location Kaiserslautern).

In addition to the University Kaiserslautern-Landau and the DFKI, the technical universities in Berlin and Dresden, the University of Bremen, the Friedrich-Alexander University Erlangen-Nuremberg, the Barkhausen Institute, the Institute for Automation and Communication (ifak) and the Fraunhofer Institute for Integrated Circuits IIS are also involved.

The Kaiserslautern engineers will be presenting the 6G platform and the work of the participating research institutions at their own research stand at the Hannover Messe. Their offer is also aimed at interested companies and institutes.

Questions can be directed to:

Michael Karrenbauer

Institute of Radio Communication and Navigation / University Kaiserslautern-Landau (Location Kaiserslautern)

Phone: +49 631 205-2702

E-mail: michael.karrenbauer(at)rptu.de

wissenschaftliche Ansprechpartner:

Michael Karrenbauer

Institute of Radio Communication and Navigation / University Kaiserslautern-Landau (Location Kaiserslautern)

Phone: +49 631 205-2702

E-mail: michael.karrenbauer(at)rptu.de



Professor Dr. Hans Schotten.

Credit: DFKI

Credit: DFKI