

## **Department of Electromagnetic Field**

Faculty of Electrical Engineering, CTU in Prague

would like to invite you to a guest lecture

## Prof. Dr. Uwe-Carsten Fiebig

(DLR - German Aerospace Center)



## Towards a robust communication infrastructure for massive UAV scenarios

When:1st December 2016 at 2:30 p.m.Where:Technicka 2, Prague 6, room no. 80

The market for unmanned aerial vehicles (UAVs) grows substantially with numerous applications spanning goods transport, surveillance, movie ma-

Promising communication solutions will be discussed focusing on the control and autonomous operation of UAVs.

king, precision farming and emergency help. We expect a further dramatic growth in applications, in the number of flights, and in the number of unmanned aerial vehicle sales over the next years and decades.

In this talk we look 20 to 30 years ahead and provide some thoughts about communication technologies for future massive UAV scenarios. With massive UAV scenarios we mean 1 UAV per person. We expect UAVs to fly autonomously. Apart from onboard sensors and software, communication will play an essential role to ensure a safe operation of UAVs.





**Uwe-Carsten Fiebig** was born in Augsburg, Germany, in 1962. He studied electrical engineering at the Technical University of Munich (TUM), Germany, and spent the last year of his studies at Ecole Supérieure en Electrotechnique et Electronique in Paris, France. In 1987 he received the Dipl.-Ing. degree from TUM and in 1993 the Dr.-Ing. degree from University of Kaiserslautern. He joined the Institute of Communications and Navigation, DLR (German Aerospace Research), Oberpfaffenhofen, Germany, in 1988. In 1995 and 1996, he was a Guest Scientist at the Communications Research Center, Ottawa, Canada, and at the Yokohama National University, Japan, respectively. Since 1994, he has been the Head of the Department Communications Systems which carries out research in navigation, aeronautical communication and navigation as well as for terrestrial and aeronautical communications. He is an Honorary Professor at the University of Ulm, Germany, and teaches satellite communications and navigation.