

Contributions on fast antenna diagnosis and measurements

Date, time and location: March 27th, 2018, 17⁰⁰-18⁰⁰, room 64

The increasing complexity of antennas calls for the development of characterization procedures that are fast and offer analysis tools such as diagnosis. By exploiting at most the information about the radiating structure under test, it is possible to significantly reduce the number of required measurement points for a proper characterization. Application cases with experimental validations will be shown: antenna testing and fast far field characterization.

About the Lecturer

Benjamin Fuchs received the M.Sc. and electrical engineering degrees in 2004 from the National Institute of Applied Science of Rennes, France, and the Ph.D. degree in signal processing and telecommunications and the “Habilitation à Diriger des Recherches” from the University of Rennes 1, France, in 2007 and 2016, respectively. He was during his Ph.D. a visiting scholar at the University of Colorado at Boulder, USA.

In 2009, he joined the Institute of Electronics and Telecommunications of Rennes (IETR) as a researcher at the Centre National de la Recherche Scientifique (CNRS). He has spent three years (2008 as postdoctoral research fellow and 2011-2012 on leave from CNRS) at the Swiss Federal Institute of Technology of Lausanne (EPFL), Switzerland.

His current research interests revolve around electromagnetic signal processing for antenna synthesis and microwave inverse problems. More specifically, he is working on array synthesis, antenna diagnostic, electromagnetic field interpolation and phase retrieval.