

Kolloquium

Am Freitag, dem 28. November 2014, um 14:15 Uhr hält

Professor Michaël Gauthier
Automation and Micromechatronics Department (AS2M)
FEMTO-ST Institute, Frankreich

einen Vortrag mit dem Titel

Trends and challenges in micro-nano-robotics

Der Vortrag findet im Raum OFFIS-D21 statt.

Abstract:

Since 1990's, scientific activities in miniaturized robotics have grown and this field is now a well-established and well-recognized part of the robotics. In the last ten years, industries in miniaturized robotics have been launched all around the world based on the international know-how of academic research institutes.

Scientific and technological challenges deal with (i) the automation and the improvement of autonomy of the current systems; (ii) the improvement of the precision and the capabilities of the systems; (iii) the new innovative robotic solutions for nanoscale manufacturing. The current identified markets are (i) the bio-medical robots for in-vivo and in-vitro applications; (ii) the industrial robots for micro-assembly in the field of optical system, nanosensors, micromechanics; and ((iii) the scientific instrumentation in the field of small samples characterization, cell biology, micro/nano scale material testing, ultra-small probing, or nanofriction.

Short biography:



Michaël Gauthier obtained his PhD from Université de Franche-comté in 2002. From 2002 to 2011 he was an post-doctoral researcher at Laboratoire d'Automatique de Franche-Comté, France and FEMTO-ST. In May 2011 he finished his habilitation and is now a full professor and the head of the AS2M department. He is the founder of PERCIPIO ROBOTICS SA and is member of the Board of Directors.

His research interest include robotic micro-nano assembly, microhandling and modeling of micro-objects' interaction. He was partner in several national and European research projects and has published 29 journal articles and over 40 articles in international conferences.

Eingeladen von: Prof. Dr.-Ing. habil. Sergej Fatikow