



**Fakultät 7**  
Konstruktions-,  
Produktions- und  
Fahrzeugtechnik

# 32. Optics-Colloquium

## ITO Stuttgart



**Central Topic 2017**

## Optics for Medical and Nano Technologies

**Date:** **Wednesday, September 27, 2017, 10.00 – 20:00**

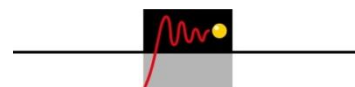
**Location:** Lecture Hall V 9.01 (Lecture Hall in the building Pfaffenwaldring 9, in direct vicinity of the S-Bahn Station „Universität“)  
University of Stuttgart, Pfaffenwaldring 9, 70569 Stuttgart

### Program

- 10:00**      **Welcome Address and Introduction**  
**Prof. Dr. Wolfgang Osten**  
Institut für Technische Optik, Universität Stuttgart
- 10:30**      **Speckle, Scattering and Imaging**  
**Prof. Dr. Chris Dainty**  
National University of Ireland, Galway, Ireland
- 11:00**      **Applications of Digital Holography with the Principle of Inverse Scattering**  
**Prof. Dr. YongKeun Park**  
Department of Physics, KAIST, Korea
- 11:30**      **Opto-Biology: As the Biological Matter Can Cooperate to Microscopy**  
**Dr. Pietro Ferraro**  
CNR-ISASI - Institute of Applied Sciences & Intelligent Systems, Naples, Italy
- 12:00**      **Lunch Break**
- 13:00**      **Lithography Optics Continues to Enable Moore's Law**  
**Winfried Kaiser**  
Carl Zeiss SMT GmbH, Oberkochen, Germany

- 13:30**      **An Overview of Metrology and Control Challenges in Semiconductor Lithography**  
**Dr. Stefan Keij**  
ASML Veldhoven, The Netherlands
- 14:00**      **New Ways for High Precision Testing of Large Optical Components Under Harsh Environmental Conditions**  
**Prof. Dr. James C. Wyant**  
Optical Science Center, University of Arizona, Tucson, USA
- 14:30**      **The Light Years Ahead: How Today's Promising Augmented and Virtual Reality Markets Help Shape New Optics Frontiers**  
**Dr. Bernard Kress**  
Microsoft Corporation, Mountain View, USA
- 15:00**      **Coffee Break**
- 15:30**      **The Nanopositioning and Nanomeasuring Machine NPMM-200: Sub-Nanometer Resolution and Highest Accuracy in Extended Macroscopic Working Areas**  
**Prof. Dr. Eberhard Manske**  
Technische Universität Ilmenau, Germany
- 16:00**      **Bestowal of the 2017 Hans-Steinbichler-Award for Outstanding Contributions to Optical Metrology**  
Laudation: Prof. Dr. Ichirou Yamaguchi, 2013 Awardee  
Presentation: Dr. Marcus Steinbichler, Neubeuern, Germany
- 16:30**      **Opening of the ITO Nano-Lab and Demonstrations**
- 17:00**      **Get together with finger food and beverages**
- 20:00**      **End of the Colloquium**

**Exhibitors and Sponsors:**



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 Innovationsnetz Optische Technologien