MAX PLANCK INSTITUTE OF QUANTUM OPTICS



Garching, 09.05.2011

Press Release

"EFTF Young Scientist Award" for Tobias Kippenberg



For the development of planar frequency combs Professor Tobias J. Kippenberg, previous leader of the independent research group "Laboratory of Photonics and Quantum Measurements" at the Max Planck Institute of Quantum Optics in Garching (near Munich) and today associate professor at the Ecole Polytechnique Fédérale de Lausanne (EPFL) in Switzerland, is presented with the EFTF Young Scientist Award of the European Frequency and Time Forum (EFTF). Scientists under the age of 40 are honoured with this award sponsored by the Societé Francaise des Microtechniques et de Chronométrie for outstanding advances in the field of time and frequency metrology. The Prize

has been awarded to Professor Kippenberg in May 2011 in San Francisco on the occasion of the International Frequency Control Symposium for his "contributions to optical frequency metrology by the demonstration of monolithic micro resonator frequency comb generators".

Tobias Kippenberg, born in 1976 in Berlin, studied physics first at the Technichal University Aachen. In 1999 he moved to Caltech (California Institute of Technology, Pasadena, USA), where he received his PhD in 2004. In 2005 he finished his research work at Caltech in the group of Kerry Vahala on the development of microresonators with ultralong photon lifetimes. He came back to Germany to lead the independent Max Planck Research Group "Laboratory of Photonics and Quantum Measurements" in the Division of Prof. Hänsch. He carried out his habilitation in the area of optomechanics at the chair of Prof. Hänsch at the Ludwig-Maximilians-Universität Munich in 2009. In the same year Tobias Kippenberg was appointed as tenure track assistant professor at the Ecole Polytechnique Fédérale de Lausanne in Switzerland.

The research focus of Professor Kippenberg is on the area of optomechanics using microresonators and their applications in metrology. The "mini-frequency combs" based on monolithic microresonators which have been developed at MPQ can be used for optical frequency measurements and also for designing clocks of extremely high precision. For this development Tobias Kippenberg has already received the renowned Helmholtz Prize of the Physikalisch-Technische Bundesanstalt (PTB) in 2009, together with Dr. Ronald Holtzwarth and Pascal Del'Haye. In the same year Tobias Kippenberg was also awarded the Fresnel Prize for his fundamental contributions to optomechanics.

Contact:

Dr. habil. Tobias J. Kippenberg (PhD) Ecole Polytechnique Federale de Lausanne (EPFL) (Swiss Federal Institute of Technology Lausanne) Associate Professor phone: + 41 21 69 34428 (CH) / +41795350016, e-mail: www.mpq.mpg.de/k-lab

Hans-Kopfermann-Str. 1 D-85748 Garching

Phone:+49(0)8932 905-0 Fax:+49(0)8932 905-200

Press & Public Relations, Dr. Olivia Meyer-Streng

Phone: +49(0)8932 905-213 E-mail: olivia.meyerstreng@mpq.mpg.de