



**PRESS RELEASE**

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**Dr. Michael Wolf receives  
QIPC Young Investigator Award 2007**

Dr. Michael Wolf, a research scientist at Max Planck Institute of Quantum Optics in Garching (near Munich), has received the renowned **QIPC Young Investigator Award 2007**. This prize is given by the European research community QUROPE to "a researcher under the age of 35, for the best research recently published or presented at one of the biannual QIPC (Quantum Information Processing and Communication) major conferences." The Award Committee paid special attention to the most groundbreaking contributions, while also taking into account the overall achievements of the candidates. Dr. Wolf shares the prize with the Polish theoretician Dr. Michal Horodecki of the Gdansk University of Technology.

Dr. Michael Wolf was born on 24 January, 1974, in the Bavarian town Schongau. He began his education in physics at Ludwig Maximilians University Munich in 1993. In 1995 he changed to Ruprecht-Karls-University, Heidelberg, where he received his diploma in physics. He got his Ph.D. at the Technical University of Braunschweig in May 1999. Since February 2003 he works as research scientist in the **Theory Division** of Prof. Ignacio Cirac, Director at Max Planck Institute of Quantum Optics (MPQ).

Dr. Michael Wolf receives the prize for the following publications:

- **Determination of quantum capacities of quantum channels** (M. Wolf et al, PRL 98, 130501, 2007)
- **Bringing together Quantum Information and many-body physics (Matrix product states and PEPS), in particular in connection with the quantum phase transitions** (M. Wolf et al, PRL, 97, 110403, 2006)
- **Discovery of the area law violation for fermions** (M. Wolf, PRL 96, 010404, 2006)
- **Providing deep understanding of Gaussian quantum systems** (M. Wolf et al, PRL 96, 080502, 2006) and earlier papers.

In his work Dr. Wolf investigates mathematically the fundamental limits for transmitting and processing quantum information and applies the tools developed in this context to many-body systems. The aims of his research are to optimize the use of resources, and to sharpen our understanding of the properties quantum matter can exhibit at small temperatures.

The award will be presented at the upcoming Barcelona QIPC meeting on October 15 - 19. It is endowed with a diploma and a lump sum of 3000 Euro.

**Further information:**

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