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Press Release

**Universidad Complutense de Madrid contributes honorary medal  
to Professor Ignacio Cirac**

**For his outstanding scientific merits Professor Ignacio Cirac, Director at Max Planck Institute of Quantum Optics (Garching, near Munich) is going to receive the Honorary Medal of the Universidad Complutense de Madrid. This is the place, where he began his education in physics. “I am especially happy with this great honour, since it comes from the University where I was introduced to the world of Physics; a place where I still keep many colleagues and friends,” Professor Cirac says. On October 2, 2009, the medal will be presented at a formal reception held at the Spanish university.**

Professor Ignacio Cirac was born in the City of Manresa in 1965. He studied theoretical physics at the Universidad Complutense de Madrid where he received his PhD in 1991. He began his career in physics as a “Professor Titular” at the Universidad de Castilla-La Mancha where he stayed till 1996. In 1996 he became Professor at the department of Theoretical Physics at Leopold Franzens University Innsbruck. Since 2001 he is Director at Max-Planck Institute of Quantum Optics and head of the Theory Division.

At MPQ Professor Cirac investigates new possibilities of controlling the world of atoms, molecules, and photons. In his research he explores how to exploit their quantum mechanical behaviour in order to process and transmit information in more efficient and secure ways. This is a precondition for e.g. quantum computing. His group also develops theoretical tools to describe many-body quantum systems, which may lead to a better understanding of macroscopic phenomena such as superconductivity. Furthermore, Prof. Cirac and his collaborators created new theoretical tools to characterize and quantify entanglement, and participates in the creation of a new theory of information based on quantum mechanics.

No doubt the Universidad Complutense de Madrid is very proud of its former scholar. Professor Ignacio Cirac has by now become one of the most renowned scientists in the field of quantum information and quantum computation as can be seen by the number of scientific awards he has received. E.g., in 2005 he was awarded the “Quantum Electronics Prize” of the European Science Foundation. In May 2006 he was the ever youngest winner of the renowned Royal Spanish Prince of Asturias Prize, and in the same year he received the International Quantum Communication Award together with Professor Peter Zoller (University of Innsbruck, Austria). In January 2009 he again shared the “Frontiers of Knowledge Award in Basic Sciences” of the Spanish BBVA Foundation with Professor Peter Zoller. *Olivia Meyer-Streng*

**Contact:**

**Prof. Dr. Ignacio Cirac**

Professor of Physics, TU München  
Max Planck Institute of Quantum Optics  
Hans-Kopfermann-Straße 1, 85748 Garching  
Phone: +49 - 89 / 32905 705 / 736  
Fax: +49 - 89 / 32905 336  
E-mail: [ignacio.cirac@mpq.mpg.de](mailto:ignacio.cirac@mpq.mpg.de); [www.mpq.mpg.de/cirac](http://www.mpq.mpg.de/cirac)

Press & Public Relations,  
Dr. Olivia Meyer-Streng

Phone:  
+49(0)8932 905-213  
E-mail: [olivia.meyer-streng@mpq.mpg.de](mailto:olivia.meyer-streng@mpq.mpg.de)

Hans-Kopfermann-Str. 1  
D-85748 Garching

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