



PRESS RELEASE

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Professor Ignacio Cirac receives National "Blas Cabrera" Prize for Physical, Material and Earth Sciences

Professor Ignacio Cirac, Director at Max Planck Institute of Quantum Optics (Garching, near Munich) has received this years Spanish *Premio Nacional "Blas Cabrera" de Ciencias Físicas, de los Materiales y de la Tierra*. The National Prize is awarded by the Spanish Ministry of Sciences. As was announced by the jury on October 3, 2007, the prize has been awarded this year in five different categories.

This Spanish National Prize, named after the Spanish physicist Blas Cabrera (1878 – 1945), has been given to Prof. Ignacio Cirac for his „extraordinary contributions to atomic physics, condensed matter physics, and specifically to quantum information and quantum physics.“

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 Ph. D. in 1991. He started his scientific career at the Universidad de Castilla-La Mancha, worked as a research associate at the University of Colorado and then became head of 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.

One goal of his research is to propose and analyze experiments that aim at observing and discovering interesting quantum phenomena in atomic systems. Under certain conditions e.g. atomic gases can take on exotic properties once they reach very low temperatures. Another focus is to investigate, how atomic systems can be controlled and manipulated at the quantum level using lasers. Professor Cirac is also leading in the development of a theory of Quantum Information which will be the basis of several applications in the world of communication and computation once microscopic systems can be completely controlled at the quantum level. The concepts developed in the field of Quantum Optics and Quantum Information are also applied to other fields, in particular to Condensed Matter Physics.

Professor Ignacio Cirac has been the recipient of several scientific awards. In 2005 he was awarded the renowned "Quantum Electronics Prize" of the European Science Foundation and the honorary doctorate of the Universidad de Castilla-La Mancha, in May 2006 he received the Royal Spanish Prince of Asturias Prize. [O.M.]

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