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Peter Zoller is Presented the 2010 Benjamin Franklin Medal

On 29 April in Philadelphia, USA, physicist Peter Zoller will be awarded the Benjamin Franklin Medal in Physics for his groundbreaking contribution to quantum information. Zoller will receive the award together with his research colleagues Ignacio Cirac and David Wineland.

The Benjamin Franklin Medal is presented annually by the American Franklin Institute to outstanding scientists from different scientific fields. Founded in 1824, the Franklin Institute is one of the oldest institutions in the USA for funding and promoting science. This year the Benjamin Franklin Medal in Physics will be jointly awarded to the two theoretical physicists Ignacio Cirac and Peter Zoller and the experimental physicist David Wineland for their groundbreaking work in the field of quantum optics and quantum information. Peter Zoller is Professor for Theoretical Physics at the University of Innsbruck and Scientific Director of the Institute for Quantum Optics and Quantum Information (IQOQI) at the Austrian Academy of Sciences (ÖAW). Ignacio Cirac held a professorship at the University of Innsbruck from 1996 to 2001 and is now Director for Quantum Optics at the Max Planck Institute in Garching, Munich, Germany. The American physicist David Wineland researches at the National Institute of Standards and Technology (NIST) in Boulder, Colorado, USA. Wineland – similar to the research group led by Innsbruck experimental physicist Rainer Blatt – has experimentally realized concepts for establishing a quantum computer proposed by Cirac and Zoller and, thus, was first in proving its feasibility in a laboratory.

Award for outstanding research work

The Franklin Institute was named after Benjamin Franklin, one of the founding fathers of the USA. Its mission is to inspire an understanding of and passion for science and technology learning. Since 1826 the Franklin Institute has presented awards to outstanding researchers. Previous laureates include, for example, Thomas Edison, Marie Curie, Max Planck, Albert Einstein and Stephen Hawking. One of the 2010 awardees is the founder of Microsoft, Bill Gates. Since 1998 the Benjamin Franklin Medal has been presented to scientists from various fields such as chemistry, computer and cognitive sciences, earth and environmental sciences, life sciences and physics. The Award Ceremony will take place in the



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Benjamin Franklin National Memorial in Philadelphia, USA on 29 April 2010 and will be attended by more than 800 select guests.

Peter Zoller: multiple laureate

In 1995 Peter Zoller and Ignacio Cirac proposed a model for a quantum computer, which is based on the interaction between lasers and cold and electromagnetically trapped ions. In the last couple of years the fundamental principles of this concept have been realized experimentally. The model is considered to be the most promising one for developing a quantum computer. Peter Zoller has received multiple awards for his successful work in the field of quantum optics and quantum information, and in particular, for his pioneering work on quantum computers and quantum communication: for example, the BBVA Foundation's Frontiers of Knowledge Award (2009), one of the most highly endowed international research awards; the Dirac Medal (2006), the Max Planck Medal (2005) of the German Physical Society, the Max Born Award (1998) of the Optical Society of America, and the Wittgenstein Award (1998), the most prestigious Austrian scientific award. Peter Zoller is a member of numerous scientific Academies worldwide, for example the National Academy of Sciences in the USA.

Pictures of Prof. Zoller at <http://iqoqi.at/download>

Pictures from the award ceremony online by Friday 30 April 2010 at

<http://www2.fi.edu/press/awards/>

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