



PRESS RELEASE

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Colloquium in Memory of Prof. Herbert Walther, Cofounder of MPQ and Pioneer in Laser Research

At a special colloquium on July 19, 2007, members of Max Planck Institute of Quantum Optics (MPQ) honoured Professor Herbert Walther who died last year on July 22. Prof. Walther has been cofounder of MPQ and its Director for many years. He has strongly influenced the field of Quantum Optics. In memory of his merits the lecture hall was named after him in a silent ceremony. At the same occasion a portrait made by the painter Jürgen Jaumann was inaugurated in order to set him “a modest memorial” with the words of the managing Director Prof. Ferenc Krausz.

Herbert Walther was one of the founding directors of MPQ. In 1976 he initiated, in cooperation with Professor Ludwig Kompa and Dr Siegbert Witkowski, a Laser Research Group at Max Planck Institute of Plasma Physics (IPP) comprising the fields of *Laser Plasma*, *Laser Chemistry* and *Laser Physics*. Five years later this project group received the status of an independent institute of Max Planck Society. In 1986 the institute was relocated to a new building in Hans-Kopfermann-Straße. Till his retirement in 2003 Prof. Walther was director at MPQ and head of the Laser Physics Division. At the same time he held a chaired position at the University of Munich. Even after retirement he was most actively involved in research as leader of the Laser Physics Group.

As early as in the 1970s Prof. Walther recognized the importance of laser research. Being a very influential science politician and a member of important scientific panels and organizations he succeeded in firmly establishing laser physics and quantum optics in Germany. In his role as an excellent scientist he strongly influenced the field of quantum optics by groundbreaking experiments. One of his research focuses was the interaction between single photons and single atoms or ions, which led to the development of the so called “micromaser”, an instrument that allows the generation of non-classical radiation. With his visionary ideas about light-matter-interaction he was able to observe new quantum phenomena and to answer questions only theorists had dealt with before.

Another research focus was the spectroscopy of ultracold ions stored in a Paul trap. Such a system could lead to the development of atomic clocks with extremely high precision. But Walther’s influence on science reached far beyond quantum optics. Since the beginning of the 1970s he has explored the use of laser-Lidar for the measurement of air pollutants or trace analysis in the atmosphere.

In his speech one of his former students, Prof. Dieter Meschede (Institute of Applied Physics, Universität Bonn) explained the importance of Walther's work: „The era of Prof. Walther has been marked by a very important transition: atomic physicists changed from being observing explorers to being “quantum engineers”. This development would not have been possible without the enthusiasm and the thirst for knowledge of scientists like Prof. Walther.”

With his wide spread research activities Prof Walther has prepared the ground for the institute now being one of the worldwide top research facilities in the most fascinating field of quantum optics.

Naming the lecture hall after this great person and scientist shall, with the words of the managing Director Prof. Ferenc Krausz, „remind all members of MPQ, now and forever, how much the institute and each single person owe to Herbert Walther“.[O.M.]

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