

Garching, 10 December 2013

Press Release

Prof. Theodor W. Hänsch has been named a Fellow of the National Academy of Inventors (NAI).



(Foto: Volker Steger)

The U.S. National Academy of Inventors (NAI) has announced on December 10, 2013, that Professor Theodor W. Hänsch has been elected Fellow of the NAI. The 94 newly elected NAI Fellows will be inducted by Deputy U.S. Commissioner for Patents Andy Faile, from the United States Patent and Trademark Office, during the 3rd Annual Conference of the National Academy of Inventors, on March 7, 2014, in Alexandria (Virginia), at the headquarters of the United States Patent and Trademark Office.

Professor Hänsch was born in Heidelberg in 1941. He studied physics at the University of Heidelberg, earning his doctorate in 1969. He went on to post-doctoral study in the United States, and was a professor of physics at Stanford University from 1975 to 1986. Since 1986 Professor Hänsch has been Director at the MPQ and Professor of Experimental Physics at the Ludwig-Maximilians-Universität in Munich. Since 2006, he holds a chair at the LMU endowed by the Carl Friedrich von Siemens Foundation.

His main research fields are the high-precision laser spectroscopy of hydrogen and similar elements and the investigation of ultracold quantum gases. His work in laser physics and quantum optics has especially influenced the field of cold atoms by the method of laser cooling and enabled precision measurements of atomic parameters. The **Nobel Prize in Physics 2005** was awarded to him for the development of the **frequency comb technique** which greatly improved the precision of atomic clocks and set the basis for new experiments in metrology.

Professor Hänsch has received many scientific prizes and awards. Among others he was awarded the Gottfried Wilhelm Leibniz Prize of the Deutsche Forschungsgemeinschaft in 1988. In 2006 the *Großes Bundesverdienstkreuz mit Stern* (Great Cross of Merit with Star) of the Federal Republic of Germany was conferred upon him. In June 2008 he became member of the 'Order Pour le mérite' which was established by the Prussian King Friedrich Wilhelm IV in 1842. In November 2011 he received the Wilhelm Exner medal from the Austrian 'Gewerbeverein'.

Prof. Hänsch is a member of numerous scientific organisations and academies, for example, the European Physical Society, the Bavarian Academy of Sciences, the Pontifical Academy of Sciences, the Deutsche Akademie der Naturforscher Leopoldina. The **invention of the laser frequency comb** has led to a variety of tools used in many fields of photonics – from molecular spectroscopy to the calibration of spectrographs in astrophysics – that have gained patents both in Europe and the USA. A spring-off company Menlo Systems GmbH was founded in 2001. *Olivia Meyer-Streng*

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