



## PERSONAL DETAILS

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**Name:** Prof. Dr. Ferenc Krausz  
**Date of Birth:** 17 May 1962  
**Place of Birth:** Mór (Hungary)  
**Nationality:** Hungarian, Austrian

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## CURRENT AFFILIATIONS

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Ludwig-Maximilians-Universität (LMU)  
Chair of Experimental Physics – Laser Physics  
Am Coulombwall 1  
D-85748 Garching

Max-Planck-Institut für Quantenoptik (MPQ)  
Director  
Hans-Kopfermann-Str. 1  
D-85748 Garching

## APPOINTMENTS

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Since 2015	<b>Director</b> Centre for Advanced Laser Applications (CALA)
Since 2012	<b>Director</b> Laboratory for Extreme Photonics (LEX-Photonics)
Since 2010	<b>Distinguished Visiting Professor</b> Pohang University of Science and Technology (POSTECH)
Since 2010	<b>Director</b> Munich-Centre for Advanced Photonics (MAP)
2007 – 2009	<b>Managing Director</b> Max-Planck-Institute of Quantum Optics (MPQ)
Since 2006	<b>Director</b> International Max Planck Research School of Advanced Photon Science (IMPRS-APS)
2006 – 2009	<b>Deputy Director</b> Munich-Centre for Advanced Photonics (MAP)
Since 2004	<b>Full Professor, Chair of Experimental Physics – Laser Physics</b> Ludwig-Maximilians-Universität (LMU)
Since 2004	<b>Director</b> Max-Planck-Institute of Quantum Optics (MPQ)
1999 – 2004	<b>Full Professor</b> Vienna University of Technology, Department of Electrical Engineering
1996 – 1998	<b>Assistant Professor</b> Vienna University of Technology, Department of Electrical Engineering

## ACADEMIC EDUCATION

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<b>1993</b>	<b>Habilitation with distinction</b> Vienna University of Technology, Department of Electrical Engineering
<b>1991 – 1993</b>	<b>Postdoctoral fellow</b> Vienna University of Technology, Department of Electrical Engineering
<b>1991</b>	<b>Ph.D. with distinction in laser physics</b> Vienna University of Technology, Department of Electrical Engineering
<b>1988 – 1991</b>	<b>Ph.D. studies</b> Vienna University of Technology, Department of Electrical Engineering
<b>1985 – 1987</b>	<b>Ph.D. studies</b> Budapest University of Technology, Institute of Physics
<b>1985</b>	<b>Diploma with distinction in electrical engineering</b> Budapest University of Technology
<b>1981 – 1985</b>	<b>Undergraduate studies in electrical engineering</b> Budapest University of Technology
	<b>Undergraduate studies in theoretical physics</b> Eötvös Loránd University, Budapest

## RESEARCH FOCUS

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<b>Main Fields</b>	Laser physics, X-ray physics, nonlinear optics, time-resolved spectroscopy
<b>Current Interest</b>	Synthesis of intense, controlled waveforms of laser light Real-time observation and control of electron motion in atomic systems Exploring the ultimate limits of electronics and routes for approaching them Development of laser-based sources and techniques for early diagnosis and therapy of cancer

## MAJOR ACHIEVEMENTS

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Co-invention of chirped multilayer mirrors and their use for the routine generation of few-cycle light  
Generation and measurement of controlled light waveforms and isolated attosecond pulses, the use of these tools for real-time observation of the atomic-scale motion of electrons, including the first time-resolved measurement of the photo effect, inner-shell decay, optical-field-induced tunneling, valence electron motion, charge transport through atomic layers, and optical-field-induced changes in the physical properties of solids  
These breakthroughs heralded the emergence of a new field: *attophysics*

For more details on research contributions, incl. peer-reviewed publications and selected talks, please visit <http://www.attoworld.de/Mainpages/Team/index.html#448>

## RESPONSIBILITIES

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<b>2012</b>	Co-founder of the Dennis-Gabor Society, Berlin ( <a href="http://www.dennis-gabor.de">www.dennis-gabor.de</a> )
<b>2010 – 2014</b>	Advising the President of the Hungarian Academy of Sciences on strategic matters Initiating, establishing, and coordinating collaborative research activities among 5 institutes of the Max-Planck-Society and 5 institutes around the Pacific Rim in the framework of the Max-Planck-Center for Attosecond Science
<b>Since 2009</b>	Initiating and coordinating the creation of the Laboratory of Extreme Photonics (LEX-Photonics) at the LMU for the advancement of the technology of few-cycle light  Initiating and coordinating the creation of the Centre for Advanced Laser Applications (CALA) for the development of laser-driven brilliant X-ray and particle sources and their use for early cancer detection and therapy
<b>Since 2008</b>	Establishing and coordinating a research cooperation between the MPQ and the King Saud University at Riyadh ( <a href="http://www.mpg.de/cms/mpq/en/projects/ksu/index.html">www.mpg.de/cms/mpq/en/projects/ksu/index.html</a> )
<b>Since 2007</b>	Advising the President of the LMU on strategic matters
<b>2007 – 2009</b>	Managing and coordinating the work of scientific, technical and administrative staff (some 400 people) at the MPQ ( <a href="http://www.mpg.de">www.mpg.de</a> )
<b>Since 2006</b>	Establishing and directing the International Max Planck Research School of Advanced Photon Science, offering a world-class graduate training and education program for some 50 Ph.D. students from all over the world ( <a href="http://www.mpg.de/APS">www.mpg.de/APS</a> )  Establishing, coordinating, and (since 2010) directing the cross-disciplinary research activities of some 40 groups from 9 departments at the LMU and the Technical University of Munich, and the MPQ, in the areas of physics, chemistry, biology and medicine ( <a href="http://www.munich-photonics.de">www.munich-photonics.de</a> )
<b>Since 2004</b>	Coordinating and directing the research of more than a hundred researchers and technical staff at the LMU-MPQ Laboratory for Attosecond Physics ( <a href="http://www.attoworld.de">www.attoworld.de</a> )

## HONORS

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Thomson Reuters Citation Laureate in Physics, 2015<sup>1</sup>  
Listed in *The World's Most Influential Scientific Minds 2014*,<sup>2</sup> Thomson Reuters, United States of America, 2014  
Otto-Hahn-Preis of the DPG, GDCh and the City of Frankfurt/M, Germany, 2013  
King Faisal International Prize for Science, Saudi Arabia, 2013  
Knight's Cross of the Order of Merit of Hungary, 2012  
Member of the Academia Europaea, United Kingdom, since 2012  
Member of the European Academy of Sciences (EURASC), Belgium, since 2012  
Bundesverdienstkreuz am Bande (Order of Merit of the Federal Government), Germany, 2011  
Member of the Russian Academy of Sciences, Russia, since 2011

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<sup>1</sup> <http://thomsonreuters.com/en/press-releases/2015/september/thomson-reuters-forecasts-nobel-prize-winners.html>

<sup>2</sup> <http://sciencewatch.com/sites/sw/files/sw-article/media/worlds-most-influential-scientific-minds-2014.pdf> (As of September 2014)

Falling-Walls Lecturer, [falling-walls.com/lectures/ferenc-krausz](http://falling-walls.com/lectures/ferenc-krausz), Germany, 2011  
Honorary Professorship at the Shanghai Institute of Optics and Fine Mechanics, China, 2010  
Visiting Professorship, King Saud University, Saudi Arabia, 2010  
Distinguished Visiting Professorship, POSTECH, Korea, 2010  
Fellow, Optical Society of America, USA, 2009  
Honorary Professorship, Xian Institute of Optics, Chinese Academy of Sciences, China, 2009  
Honorary Citizen, City of Mór, Hungary, 2009  
ERC Advanced Investigator Grant, European Union, 2009  
Member of the European Academy of Sciences and Arts, Austria, 2007  
Member of the Hungarian Academy of Sciences, Hungary, 2007  
Gottfried Wilhelm Leibniz-Prize, Deutsche Forschungsgemeinschaft, Germany, 2006  
Prize of the City of Vienna for Natural and Technical Sciences, Austria, 2006  
Progress Medal of the Royal Photographic Society, United Kingdom, 2006  
Manne Siegbahn Memorial Lecture, Royal Swedish Academy of Sciences, Sweden, 2006  
Max von Laue Memorial Lecture, Physikalische Gesellschaft zu Berlin, Germany, 2006  
James Frank Memorial Lecture, Israel Academy of Sciences, Israel, 2006  
Quantum Electronics Award, IEEE Laser and Electro-Optics Society, USA, 2006  
Honorary Doctorate Degree from the Budapest University of Technology, Hungary, 2005  
Honorary Professorship at the Vienna University of Technology, Austria, 2005  
Member of the Austrian Academy of Science, Austria, 2003  
Julius Springer Award in Applied Physics, Springer, Germany, USA, 2003  
Wittgenstein Award, Federal Ministry of Science and Education, Austria, 2002  
Carl Zeiss Award, Ernst Abbe Foundation, Germany, 1998  
START Award, Federal Ministry of Science & Education, Austria, 1996  
Fritz Kohlrausch Award, Austrian Physical Society, Austria, 1994