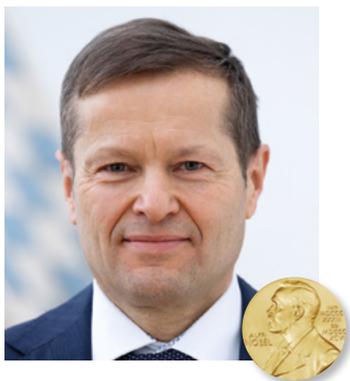


FERENC KRAUSZ



Ferenc Krausz is a Hungarian physicist and Nobel laureate whose pioneering work in attosecond science has transformed our understanding of electron dynamics in matter. In 2023, he was awarded the Nobel Prize in Physics jointly with Pierre Agostini and Anne L’Huillier for “experimental methods that generate attosecond pulses of light for the study of electron dynamics in matter.” Their breakthrough achievements opened an entirely new window onto the ultrafast processes governing atoms and molecules.

ACADEMIC AND PROFESSIONAL CAREER

Born on 17 May 1962 in Mór, Hungary, Krausz studied theoretical physics at Eötvös Loránd University and electrical engineering at the Budapest University of Technology and Economics. He earned his PhD from the Vienna University of Technology in 1991, where he later completed his habilitation and served as associate professor and professor. His early research focused on laser physics and the development of ultrashort laser pulses.

Electrons move and change state on the attosecond timescale—an attosecond being a billionth of a billionth of a second. Capturing such motion required entirely new measurement technologies. Building on rapid advances in femtosecond laser science, Krausz and his collaborators played a leading role in refining high-intensity laser systems capable of generating extremely short light bursts. In the early 2000s, his research team succeeded in producing and measuring the world’s first attosecond light pulses, marking the birth of attophysics.

These pulses enabled the first real-time observations of electron motion inside atoms. Since then, attosecond techniques have been applied worldwide to investigate fundamental processes such as photoionization and ultrafast charge dynamics, influencing fields from basic quantum physics to materials science.

In 2003, Krausz was appointed Director at the Max Planck Institute of Quantum Optics, and in 2004 he became Chair of Experimental Physics at the Ludwig Maximilian University of Munich. Since November 2025, he has served as Chair Professor in the Department of Physics at The University of Hong Kong.

AWARDS AND HONORS

- 2025 Fellow of the Max Planck School of Photonics, Germany
- 2025 Bayrischer Digitalpreis, Bavarian State Government, Germany
- 2025 Semmelweis Budapest Award, Hungary
- 2024 Order of Saint Stephen of Hungary
- 2024 Hungarian Corvin Chain, Hungary
- 2024 Grand Decoration of Honour in Gold with Sash, Austria
- 2024 Honorary Doctorate Degree, Budapest University of Technology and Economics, Hungary
- 2024 Neumann Professorship, Budapest University of Technology and Economics, Hungary
- 2024 Bavarian Maximilian Order for Science and Art, Germany
- 2023 Nobel Prize in Physics (shared with Pierre Agostini and Anne L’Huillier)
- 2022 Wolf Prize in Physics, Israel
- 2019 Vladilen Letokhov Medal, European Physical Society & Russian Academy of Sciences
- 2018 János Arany Award, Hungarian Academy of Sciences
- 2016 Member of Leopoldina, German National Academy of Sciences
- 2015 Thomson Reuters Citation Laureate in Physics
- 2014 Listed in „The World’s Most Influential Scientific Minds 2014,” USA
- 2013 Otto-Hahn-Preis, Germany
- 2012 Knight’s Cross of the Order of Merit of Hungary
- 2012 Member of the Academia Europaea, United Kingdom
- 2012 Member of the European Academy of Sciences (EURASC), Belgium
- 2011 Bundesverdienstkreuz am Bande (Order of Merit of the Federal Government), Germany
- 2011–2025: Member of the Russian Academy of Sciences, Russia (resigned in February 2025)
- 2009 Fellow of the Optical Society of America (OSA), USA
- Since 2007: Member of the European Academy of Sciences and Arts
- Since 2007: External Member of the Hungarian Academy of Sciences
- 2006 Gottfried Wilhelm Leibniz Prize of the German Research Foundation (DFG), Germany
- 2006 Prize of the City of Vienna for Natural Sciences
- 2006 IEEE Quantum Electronics Award
- 2005 Honorary Professorship, TU Wien, Austria
- 2005 Honorary Doctorate, Budapest University of Technology and Economics
- Since 2003: Member of the Austrian Academy of Sciences