

PRESS-RELEASE

Max Planck Institute of Quantum Optics and



Munich-Centre for Advanced Photonics

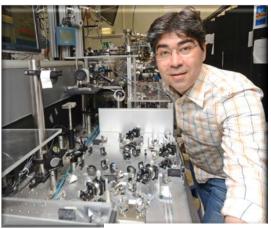
Garching, 28 July 2015

Röntgen Prize goes to Dr. Eleftherios Goulielmakis

Dr. Eleftherios Goulielmakis, leader of the research group "Attoelectronics" at the Max Planck Institute of Quantum Optics, will receive this year's Röntgen prize, which is awarded by the Justus Liebig Universität Gießen. Dr. Goulielmakis will receive this award for his "outstanding contributions to the area of attosecond physics and technology with soft X-rays".

The Röntgen prize of the Justus Liebig Universität Gießen has been awarded to junior scientists who have distinguished themselves through excellent scientific work in the basic research of radiation physics or radiation biology in memory of Wilhelm Conrad Röntgen since 1975.

Dr. Eleftherios Goulielmakis was born in Heraklion (Greece) in 1975. He studied physics at the University of Crete (Greece), where he obtained a Bachelor's degree in 2000 and a Master's degree in 2002. He earned his PhD at Ludwig-Maximilians-Universität (LMU) in Munich in 2005. He has been the leader of the research group "Attoelectronics" at the Max Planck Institute of Quantum Optics in Garching since 2010.



(Photo: Thorsten Naeser)

Over the last decade, Goulielmakis and his fellow researchers have done pioneer work in the field of extremely short, soft X-ray pulses that last less than 100 attoseconds (one attosecond is a billionth of a second). These techniques are used to explore the microcosm and allow images of ultra-fast particles such as electrons to be created, for example.

Goulielmakis and his group just recently developed a new technique that enables ultraviolet radiation to be obtained from solid objects. This technique offers perspectives for enhancing photonics in the area of X-radiation. At the same time, it improves our understanding of how to use light in the future in order to implement light-based electronic circuits that work up to 100,000 times faster than modern computers.

Dr. Eleftherios Goulielmakis received the Gustav Hertz prize from the German Physical Society (Deutsche Physikalische Gesellschaft, DPG) in 2012, won the IUPAP award for optics and an ERC Starting Grant in 2010, and was awarded the Foteinos prize by the Academy of Athens in 2007.

The award ceremony for the Röntgen prize will be held on 27 November in Gießen. On this occasion, Dr. Eleftherios Goulielmakis will talk about his field of research in a "Röntgen lecture" at the University of Gießen. On 23 September, he will give a lecture on his research at the Deutsches Museum in Munich as part of the "Wissenschaft für Jedermann" (science for everyone) lecture series.

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