

Two Prestigious Prizes in Quantum Electronics and Optics announced by the European Physical Society

MULHOUSE, [29 May 2019] – The European Physical Society is delighted to announce the 2019 winners of its two most prestigious prizes in Quantum Electronics and Optics. These prizes, awarded only once every two years, recognize the highest level of achievements in fundamental and applied research in optical physics. The awards will be presented in a special Plenary Ceremony on Tuesday, June 25, 2019 during the Conference on Lasers and Electro-Optics Europe (CLEO®/Europe) and the European Quantum Electronics Conference (EQEC), held in Munich, Germany.

2019 Prize for Fundamental Aspects of Quantum Electronics and Optics: Anne L'Huillier

The 2019 Prize for Fundamental Aspects of Quantum Electronics and Optics is awarded to Prof. Anne L'Huillier, from Lund University, Sweden. The Prize is awarded to Professor L'Huillier **“In recognition of her pioneering experimental and theoretical contributions to attosecond pulse trains using high harmonics, which form the basis of today's successful field of attosecond science.”**



Anne L'Huillier is a Swedish/French researcher in attosecond science. She was born in Paris in 1958, studied at the Ecole Normale Supérieure in mathematics and physics and defended her doctorat d'état ès Sciences Physiques de l'Université Paris VI, in 1986. She was then permanently employed as researcher at the Commissariat à l'Energie Atomique, in Saclay, France until 1995. She was postdoctoral researcher at Chalmers Institute of Technology, Gothenburg (1986), University of Southern California (1988), and visiting scientist at the Lawrence Livermore National Laboratory (1993). In 1995, she moved to Lund University, Sweden and became full professor in 1997. She was elected to the Royal Swedish Academy of Sciences in 2004, Royal Swedish Academy of

Engineering Sciences in 2012, European Academy of Sciences in 2013 and since 2018 she is a Foreign Associate to the National Academy of Sciences in the U.S.

Her research which includes both theory and experiment, deals with the interaction between atoms and intense laser light, and in particular the generation of high-order harmonics of the laser light, which, in the time domain, consist of trains of attosecond pulses. Currently, her research group works on attosecond source development and optimization as well as on applications, for example, concerning the measurement of photoionization dynamics in atomic systems.

For her outstanding contributions Anne L'Huillier has been awarded numerous distinctions including Prix Aimé Cotton of the French Physical Society in 1990, L'Oréal-UNESCO award For Women In Science 2011, Carl Zeiss Research Award and Blaise Pascal Medal in Physics from the European Academy of Sciences in 2013, EPS Emmy Noether Distinction for Women in Physics 2014. In 2011 she was awarded Chevalier de la légion d'honneur. Anne L'Huillier is a fellow of the Optical Society and the American Physical Society.

2019 Prize for Applied Aspects of Quantum Electronics and Optics: Govind Agrawal

The 2019 Prize for Applied Aspects of Quantum Electronics and Optics is awarded to Prof. Govind Agrawal, James C. Wyant Professor of Optics at the Institute of Optics, University of Rochester, USA. The Prize is awarded to Professor Agrawal “**For pioneering and groundbreaking research that underpins a wide range of current photonic technologies in the fields of semiconductor lasers, nonlinear fiber optics and optical communication systems.**”



Prof. Govind P. Agrawal is an expert on nonlinear optics, silicon photonics, and optical communications. He received the M.S. and Ph.D. degrees from the Indian Institute of Technology, New Delhi in 1971 and 1974 respectively. After holding positions at the Ecole Polytechnique, France, the City University of New York, and AT&T Bell Laboratories, Dr. Agrawal joined in 1989 the faculty of the Institute of Optics at University of Rochester, where he is currently James C. Wyant Professor of Optics.

He is an author or coauthor of more than 450 research papers, and eight books. His books on Nonlinear Fiber Optics (Academic Press, 6th ed., 2019) and Fiber-Optic Communication Systems (Wiley, 4th ed., 2010) are used worldwide for research and teaching. From January 2014 to December 2019, Agrawal served as the Editor-in-Chief of the OSA journal Advances in Optics and Photonics.

Prof. Agrawal is a Fellow of IEEE and OSA (The Optical Society) and a Life Fellow of the Optical Society of India. He is also a member of European Physical Society. In 2012, IEEE Photonics Society honored him with its Quantum Electronics Award. He received in 2013 Riker University Award for Excellence in Graduate Teaching. Agrawal was given the Esther Hoffman Beller Medal in 2015. He is also the recipient of the 2019 Max Born Award of the Optical Society. Professor Agrawal's research has touched on almost every area of quantum electronics over the last 40 years, and throughout his highly distinguished career, he has opened many new research directions that others have followed.

Background Information on EPS-QEOD

The European Physical Society provides an international forum for physicists and acts as a federation of national physical societies. Founded in 1968, the EPS plays a leading role in both scientific and policy activities within the community of European physicists. The Quantum Electronics and Optics Division (QEOD) of the EPS acts as a focal point for European research in optics and photonics through its wide range of strategic activities, sponsorship and conference organisation. In addition to the major awards described above, it also awards Young Researcher (Fresnel) and PhD Student Prizes, which will be announced shortly. See qeod.epsdivisions.org

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