

FROM THE PROCLAMATION OF 2015 AS THE UNITED NATIONS INTERNATIONAL YEAR OF LIGHT

- “ 1) ... Light plays a central role in human activities. ..Light is at the origin of life itself, and the many applications of light have revolutionized society through medicine, communications, entertainment, art and culture.
- 2) As physics of light becomes a key cross-cutting discipline of science and engineering in the twenty-first century, it is essential that the importance of the scientific study of the physics of light and the application of light-based technologies for global sustainable development is appreciated by everyone.
- 3) The year 2015 commemorates a remarkable series of important milestones in the history of the physics of light dating back 1,000, 200, 150, 100 and 50 years.
- 4) An International Year of Light will offer to UNESCO a novel and important opportunity to fulfill its mission of promoting international cooperation in science, technology and engineering for sustainable development, as well as in science education and capacity-building.”

UNESCO GENERAL ASSEMBLY
Paris: August 13, 2013



INTERNATIONAL SCIENTIFIC-THEOLOGICAL CONFERENCE

FIAT LUX

LET THERE BE LIGHT
ROME: JUNE 3-5, 2015

www.fiatluxconference.com
E-mail: fiatluxconference@gmail.com
www.facebook.com/FiatLuxConference



PRESENTATION

In colloquial language, light means knowledge: "I had a light!" In natural world, the term has a larger dimension, grouping together three main functions: energy, information, and the rhythm of time. All of them are somehow different expressions of "knowledge": gathering information and communicate means in fact to know the surrounding, acquiring energy from such knowledge, and initiating associated actions. Physics and metaphysics have always analyzed the surrounding nature from points of view which might be different but are never opposed. "Fiat Lux: Let there be light!" is proposed as a venue for scientists, philosophers, and theologians to discuss the topic of light from their various disciplines, search for a shared language, and formulate a common understanding.

TOPICS

LIGHT, SPACE AND TIME	Superluminarity, nonlinear dynamics and chaos Optical localisation Light and relativity Quantum optics & entanglement states	The man and the vision of the universe Localisation and Delocalisation Causality & Fortuity Contemporaneity and Coincidence
LIGHT AS KNOWLEDGE, COMMUNICATION & ARTS	Light and colours a physics for human sensations Optical communication protocols and Networks Imaging systems and light-matter interaction	Brightness and darkness Sensations are experiences of the surrounding world Light as knowledge Light in the Arts
LIGHT & LIFE	Bio-photons Biomorphism and optical natural bio-structures Photo-induced biochemical processes Light & evolution	Life and light What is the nature and how life interacts with it Neurophotonics

ORGANISING COMMITTEE

Eugene G. Arthur	Paolo Di Lazzaro	Joe Niemela	Mark Stockman
Pedro Barrajoń LC	John Dudley	Claudio Oleari	Katarina Svangberg
Gianfranco Basti	Jos F.G. Eussen	Rafael Pascual LC	Valentin I. Vlad
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LOCAL COMMITTEE

Pontifical Athenaeum Regina Apostolorum
Rafael Pascual
Alberto Carrara
Marcello Tedeschi
Roberto Verzellone

Sapienza Università di Roma
Eugenio Fazio
Tairi De Martino
Valerio Bonacquisti
Massimo Alonzo

INVITED SPEAKERS

- Ada Yonath, 2009 Nobel Prize in Chemistry, Weizmann Institute of Science, Rehovot (IS)**
Light at the end of the Ribosome Tunnel
- Stefan Hell, 2014 Nobel Prize in Chemistry, German Cancer Research Center, Heidelberg (DE)**
Nanoscopy with Focused Light
- Evandro Agazzi, President of Académie Internationale de Philosophie des Sciences (BE)**
Light, Intellect and Truth in Occidental Philosophical Tradition
- Fortunato Tito Arecchi, Professor Emeritus of Physics, University of Florence (IT)**
Fiat Lux versus Fiat Lumen
- Pedro Barrajoń, Theologian, Pontifical Athenaeum Regina Apostolorum, Rome (IT)**
The Theology of Light in the Augustinian Tradition
- Michael Berry, H.H. Wills Physics Laboratory, University of Bristol (UK)**
Optica Fantastica: Nature's Optics and our Understanding of Light
- Marco Bersanelli, Full Professor of Astronomy and Astrophysics, University of Milan (IT)**
The First Light in the Universe
- Vint Cerf, Chief Internet Evangelist for Google (USA)**
Illuminating our Understanding of the Internet
- Alberto Diaspro, Director of the Department of Nanophysics, Istituto Italiano di Tecnologia (IT)**
Look how Beautiful it is Shining Light at the Nanoscale
- Fausto Elisei, Professor of Physical Chemistry, University of Perugia (IT)**
Light and Molecules, Effects and Applications
- Ion Mihalescu, National Inst. Lasers, Plasma, Radiation Physics, Bucuresti (RO)**
Soft Laser Light as Tweezers for Protected Transfer of Organic/Biological Objects
- Dermot Moran, Professor of Philosophy, University College Dublin (IRL)**
Light-Metaphysics and Light as Metaphor in Christian Mystical Thought
- Claudio Oleari, senior Professor at Parma University (IT)**
Light and Colours – A Physics for Human Sensations
- Riccardo Pozzo, Director of the Department of Humanities and Social Sciences, Cultural Heritage of CNR (IT)**
Light and Cultural Heritage
- Albert Ruggi, Université de Fribourg (CH)**
Per Aspera ad Astra: Towards Artificial Photosynthesis
- Silvan, the greatest European Magician, 1991 & 2000 "Magician of the Year" Hollywood Magic Arts Academy (IT)**
The Magic of Light
- Sune Svanberg, Senior Professor at Lund University and member of the Nobel Committee (SE)**
Laser Spectroscopy Put to Work: Environment, Ecology, Food Safety and Medicine
- Joseph Zyss, Laboratoire de Photonique Quantique et Moléculaire, Ecole Normale Supérieure de Cachan (FR)**
Games of Light with Molecules, Meta-Molecules and Billiards: Symmetry, Shape, Geodesics and Scale

CONFERENCE CHAIRS

Rafael Pascual, L.C.
Science and Faith Institute
Pontifical Athenaeum Regina Apostolorum
e-mail: rpa@upra.org

Eugenio Fazio
Department of Fundamental and Applied Sciences for Engineering
Sapienza Università di Roma
e-mail: eugenio.fazio@uniroma1.it