

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 commentorates 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, 13 August 2013







FAT LUX (LET THERE BE LIGHT)

International Scientific-Theological Conference

Roma: June 3-5, 2015

www.fiatlux_conference.com E-mail: fiatlux@gmail.com

INTRODUCTION

In the common language *light* means *knowledge*: "I had a lightning"! In nature, light has a larger dimension, regrouping together three main functionalities: *light* means *energy*, *light* means *information*, *light* means also *time rhythm*. All of them are somehow different expressions of "knowledge": getting information and communicate means in fact to know the surrounding, acquire energy from such knowledge and start associated actions.

Physics and metaphysics have always analysed the surrounding nature from points of view which might be different but never opposite. FIAT LUX wants to be the place where scientists philosophers and theologians will get together to discuss on the same topics, trying to find similar languages and common understanding.

TOPICS

LIGHT, SPACE AND TIME Superluminarity nonlinear dynamics and chaos Optical localisation The man and the vision of the universe
Localisation and Delocalisation
Causality & Fortuity

Light and relativity

Quantum optics &

entanglement states

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 lightmatter interaction

of LOVE
Sensations are experiences of
the surrounding world
Light as knowledge

The triangular representation

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

LIGHT IN THE ARTS

Important dates

November 01, 2014 1° Conference Announcement

January 30, 2015 Submission deadline

February 28, 2015 Paper Acceptation

March-April, 2015 Advanced Hotel Reservation deadline

June 3-5, 2015 FIAT-LUX Conference

ORGANISING COMMITTEE

Eugene G. Arthur Pedro Barrajón LC Gianfranco Basti Piero Benvenuti Mario Bertolotti Marco Bersanelli Gianluigi Cardinali Alberto Carrara LC Piero Damosso Paolo Di Lazzaro John Dudley Jos Eussen
Eugenio Fazio
Gabriele Gionti SJ
Michal Heller
Gianni Jacovitti
Francesco Michelotti
Joe Niemela
Claudio Oleari
Rafael Pascual LC
Krisinda Plenkovich
Pietro Ramellini

Melchor Sánchez de Toca Taran Singh Mark Stockman Katarina Svangberg Tomasz Trafny Valentin I. Vlad Tuan Vo-Dinh Alan Willner Nikolay I. Zheludev

LOCAL COMMITTEE

Rafael Pascual – Pontificia Università Regina Apostolorum Alberto Carrara – Pontificia Università Regina Apostolorum Marcello Tedeschi – Pontificia Università Regina Apostolorum Roberto Vercellone – Pontificia Università Regina Apostolorum Eugenio Fazio – Sapienza Università di Roma Tairi De Martino – Sapienza Università di Roma Valerio Bonacquisti – Sapienza Università di Roma

Conference Chairs

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

Eugenio Fazio
Departmento of Fundamental and Applied Sciences for Engineering
Sanjenza Università di Roma

Sapienza Università di Roma e-mail: <u>eugenio.fazio@uniroma1.it</u> Michelangelo – The creation of light Roma: Sistine Chapel in the Vatican Museums