

18 May 2018

**Press release of the Bridge Forum Dialogue conference '*Optica fantastica: Images to illuminate the physics of light*', on 17 May 2018, by Sir Michael Berry, Melville Wills Emeritus Professor of Physics at the University of Bristol.**

The Bridge Forum Dialogue organized in cooperation with the University of Luxembourg a conference under the title: '*Optica fantastica: Images to illuminate the physics of light*', on 17 May 2018. The speaker was **Professor Sir Michael Berry, Melville Wills Professor of Physics (Emeritus) at the University of Bristol.**

Professor Alexandre Tkatchenko, Professor in Theoretical Chemical Physics at the University of Luxembourg, chaired the meeting and introduced the speaker. Professor Sir Michael Berry is a theoretical physicist known for his research in the 'borderlands' between **classical and quantum theories** and **ray and wave optics**. His emphasis is on geometrical singularities such as ray caustics and wave vortices. Professor Sir Michael Berry **discovered the geometric phase**, a phase difference arising from cyclically changing conditions with applications in many areas of wave physics, including polarisation optics and condensed matter. He has received numerous awards, including the Maxwell Medal and the Dirac Medal of the Institute of Physics, the Royal Society's Royal Medal, the London Mathematical Society's Pólya Prize, the Wolf Prize and the Lorentz Medal. He serves on scientific committees of various institutes and was knighted in 1996.

A large and distinguished audience gathered to attend the conference, including several members of the scientific community, European institutions and bodies, public authorities, companies and many students.

Professor Berry illustrated to the audience the four levels of understanding of light: rays, waves, polarization and quantum. He delivered an impressive presentation, which relied on a series of pictures, including artworks, to convey abstract concepts and show in a deep and engaging way the effects of light and related phenomena, while elucidating the related scientific theories.

The presentation was followed by a stimulating questions and answers session.

More information will be made available on the website of the Bridge Forum Dialogue a.s.b.l.: [www.forum-dialogue.lu](http://www.forum-dialogue.lu).