

## CV of Paolo Di Trapani

Paolo Di Trapani (1962; PhD in physics in 1991) is Associate Professor of Optics at Insubria University in Como (IT), where he has developed and directed *two experimental facilities based on high-power ultrashort pulse (ps-fs) lasers*. During his academic career, he has performed experimental and theoretical research in the field of laser physics and *ultrafast linear, nonlinear and quantum optics*. His main contributions concern the development of high power tunable femtosecond light sources, the understanding of spatio, temporal and spatio-temporal spontaneous localization of light in nonlinear media, and the usage non-trivial light beams (the “conical waves”) for ultra-precise laser cutting and drilling of thick transparent materials. Additionally, Paolo has been active in developing new nanostructured materials for reproducing the optical properties of the sky, and a related technology for artificial illumination. Among his main achievements, it is worth listing:

- Co-author of *>160 publications* in peer-reviewed international ISI journals, in the field of ultrafast linear and nonlinear optics (among which 14 PRL; Scopus H index = 39; over 4500 citations)
- Co-inventor of *130 patent applications* organized in over 30 independent families, in the field of lighting technology and nanostructured materials.
- Principal Investigator and/or coordinator of *>20 research projects*.
- Fund raising for over €25m from public and private partners.
- 2004-2008: Founder and director of *VINO – the “Virtual Institute for Nonlinear Optics”*, an international network of researchers that operated in regime of full sharing of knowledge, funding, equipment and training actions.
- 2001-2011: Founder and director of *STELLA - STELLA School 2011 @ Insubria University the “School for Training in Experiments with Lasers and Laser Applications”*, which is the first international school wherein PhD students are trained by leading experimentalists directly on world-class experimental facilities, up to the achievement of original scientific results. STELLA has been hosted by major EU laser facilities, *i.e.* the Laser Research Center in Vilnius (2001 and 2007), the FORTH Institute of Electronic Structure and Lasers in Heraklion (2008), the ICFO Institute for Photonic Sciences in Barcelona (2009), the Insubria University (2011) in Como in Italy, the University of Pavia (2012).
- 2001-2007: Founder and director of *“Di Luce in Luce”*, a wide-audience science-and-art theatrical exhibition, which tackles the indoor reconstruction of outdoor natural light and



colour effects, reproducing spectacular optical atmospheric phenomena, in which light is diffused, diffracted or refracted by the air, the clouds, drops of rain, branches of a tree, etc. Through a series of experiments, the actor invites us to have a glimpse of paintings, architecture, literature, photography, music and even cinema, suggesting original interpretations of masterpieces. The exhibition was staged in Como (2002, 2005), Genova (2003, 2005) and Vilnius (2007), and has been visited by over 30000 people.

[www.diluceinluce.eu](http://www.diluceinluce.eu)



CoeLux 45 HC artificial skylight

- 2009 – Present: Founder, President and CEO of the academic spin-off CoeLux® Srl ([www.coelux.com](http://www.coelux.com)), which has developed and positioned on the market a disruptive technology, capable of replacing artificial illumination by means of artificial skylights that reproduce the natural light, the visual appearance and the perceived infinite depth of

the sky and the sun. The company won, among others, the following awards and acknowledgments:

- (i) EDISONREPORT, as one of the “Top 10 lighting products of 2014”.
- (ii) LUX AWARDS 2014 – as the “Light source innovation of the year”.
- (iii) MIT TECHNOLOGY REVIEW 2015, as one of the “ten Italian Smart & Disruptive Companies”.
- (iv) DAVOS - WORLD ECONOMIC FORUM 2015, as one of the “technology pioneers 2015” (Among previous winners are: Dropbox (2012), Kickstarter (2012), Spotify (2011), Twitter (2010), Wikimedia (2008) and Google (2002)).
- (v) FX AWARDS 2015, as the “best Lighting Product of 2015”.
- (vi) MATELEC AWARD 2016, as the “Innovation and Energy Efficiency Award in the Illumination and Lighting category”.
- (vii) LUX LIVE MIDDLE EAST AWARDS 2016, as the “Judges’ Special Technology Awards”.
- (viii) DARC AWARDS 2017 - as the “best architectural lighting product”.
- (ix) EUROPEAN INNOVATION PRIZE FOR RETAIL 2017, as the sole winner.

- 2007 – Present: Co-Founder of the academic spin-off B2Laser Srl (<http://www.b2laser.it/#/step-1>), which operates in the field of ultrashort-pulse laser microfabrication