

The logo features a stylized globe with three human figures inside, surrounded by radiating lines, positioned to the left of the text 'PHABLABS 4.0'. The text is in a bold, sans-serif font, with 'PHABLABS' in blue and '4.0' in orange.

PHABLABS 4.0

PHotonics enhanced fAB LABS supporting the next revolution in digitization



Coordination and support action – 731610

Start date : 1th December 2016

Duration : 30 M

Coordinator : VUB - B-PHOT



PHOTONICS PUBLIC PRIVATE PARTNERSHIP



The concept of PHABLABS 4.0 is based on combining the world of photonics with the growing creative ecosystem of existing Fab Labs.



3 instruments 3 target groups

Photonics Workshops on 11 different topics

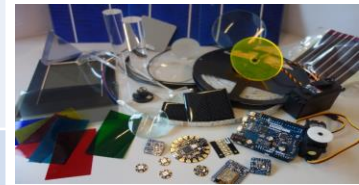
*to understand and to master the enabling character of photonics and its many applications by making, within a very short timeframe, some fascinating **component, system or piece of art** based on the unique properties of light.*

Photonics Challenger projects on 11 different topics

*an eye-opener to discovering the wide range of potential applications with photonics technology to trigger the **creativity** of the participants **in cross-KET applications** and to stimulate **innovation** with young professionals.*

Toolkits for photonics enhanced fablabs

***durable low-cost** Toolkits for Photonics-Enhanced Fab Labs to **stimulate and inspire innovation** with photonics technology and components .*



Target groups

Young minds: (age 10–14)

To **stimulate interest** in STEM and in a technical profession, with a special attention on achieving strong female engagement

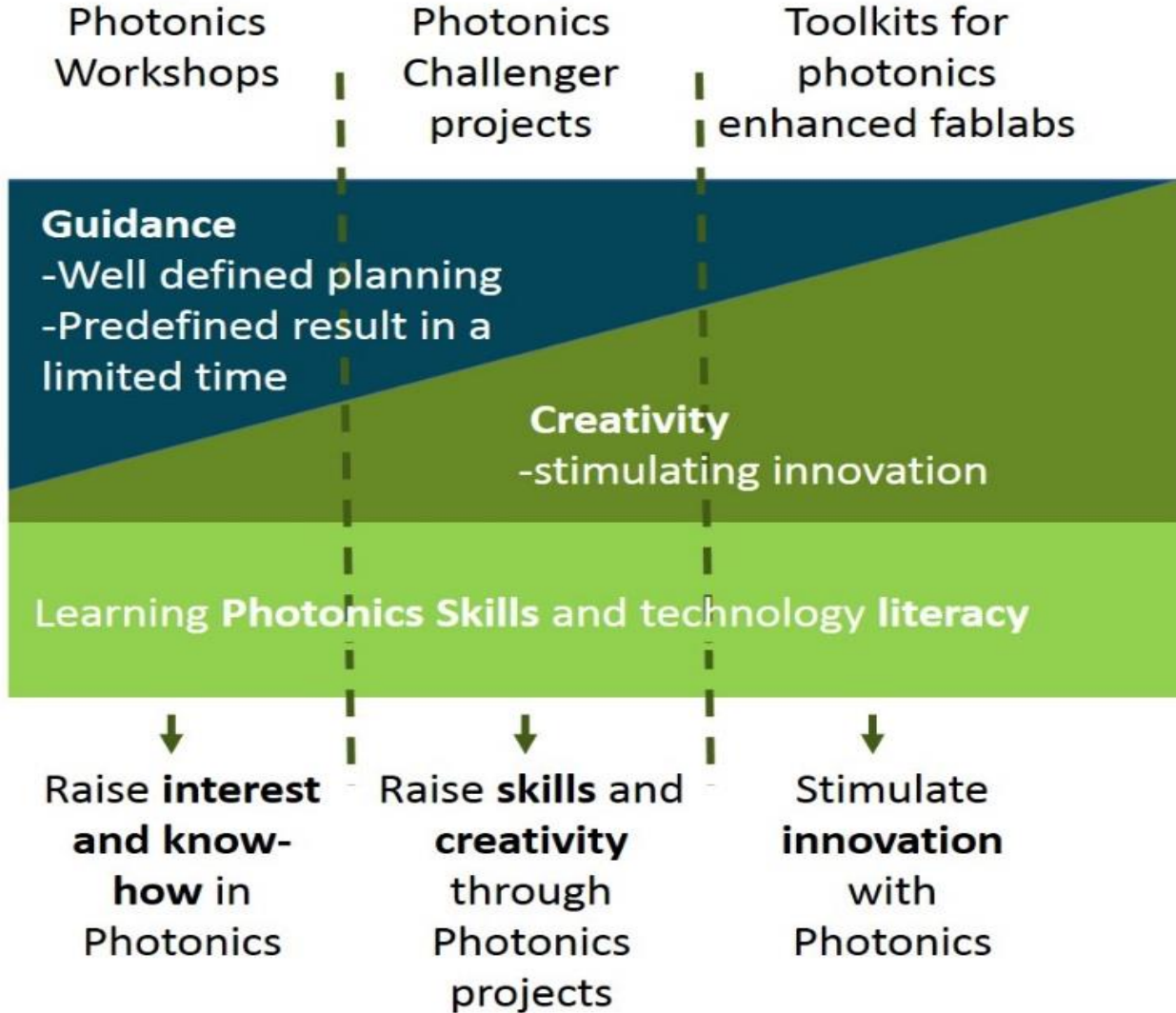
Students: (age 15–18)

To **encourage experimentation** with photonics and grasp the **strong enabling character** of this technology in combination with other KETs (Manufacturing, Electronics, Advanced Materials)

Young professionals and technicians (age 18+)

To introduce them to specific aspects of photonics and **trigger innovation** in their products, with focus on **technological possibilities and entrepreneurial opportunities**

What? Who?



Expected Impact of PHABLABS4.0 for Photonics Industry

The “Photonics Workshops”, “Photonics Challenger Projects” and “Toolkits for Photonics enhanced Fab Labs” developed by PHABLABS 4.0 will be rolled out to the **large European network of Fab Labs**, and Makerspaces in general, and as such support hands-on learning to next-generation photonics innovators in a durable way.

IMPACT for the Photonics Industry:

- *A larger skilled workforce thanks to PHABLABS 4.0*
- *A better Photonics skilled workforce*
- *Improved innovation capacity in photonics*
- **Short term** : During the PHABLABS 4.0 project, the programme of activities will have direct impact on the 14 pilot Fab Labs and on the **more than 3.000 participants** of the photonics-directed activities in those pilot Fab Labs. Thanks to the large spread and number of pilot Fab Labs in the project, this impact will be **Europe-wide**. PHABLABS 4.0 will foster **sustainable and cross-cutting interaction between research institutes and Fab Labs** by creating inspiring photonics activities for Fab Labs.
- **Long term** : In total at least **18.000 participants** of the “Photonics Workshops” can be expected within the first 3 years after the PHABLABS 4.0 project.

Coordinator Contact Details



Vrije Universiteit Brussels – Brussels Photonics Team
Pleinlaan 2, Brussels, Belgium



Hugo Thienpont
hthienpo@b-phot.org



Nathalie Debaes
ndebaes@b-phot.org



Tine De Pauw
tdepauw@b-phot.org