SEMINAR

LAPHIA
Laser & Photonics
in Aquitaine

université de BORDEAUX

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« Soft-glass optical fibres: A versatile photonic material platform for light generation and transmission from UV to mid-IR »

Tuesday 14th Jan. 2020, 11:00 – 12:00

Institut d'Optique d'Aquitaine, Amphithéâtre

Multicomponent glasses, also so-called "soft glasses", offer an extended range of optical properties that outperform silica glass for a broad number of photonics applications. The implementation of these glass systems is particularly pertinent whenever requirements for long fibre lengths and high optical power operations are alleviated.

To appreciate the prospects of these materials, we will initially highlight the key applications where soft-glass systems can truly impact on the operation performances of photonics device. We will then discuss into more details some recent results on the implementation of germanate, phosphate and chalcogenide glass fibres for the development of near-IR optical amplifiers/lasers and thermal imaging fibre bundles.

A particular attention will be drawn onto the importance of the glass synthesis and fibre fabrication processes towards the industrial exploitation of these materials/fibres.

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