



Cluster of Excellence LAPHIA Seminar

« Optical fiber lasers for sensing »

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> Auditorium - Institut d'Optique d'Aquitaine - Talence Oct. 23, 2015 from 01 :15 pm to 02 :15 pm

Abstract :

Optical fiber lasers structures for fiber optic sensors measurement and multiplexing are an attractive option because of the fact that the performance of sensor systems is enhanced considerably. In particular, they offer improved SNR when they are compared with the non-lasing ones due to the fact that the noise associated to the amplification is intended for the lasing process.

So in the recent years a number of fiber laser sensors and lasing multiplexing networks have been developed. State of art in this field, together with or own developments in single mode laser sensor, multiwavelength fiber laser sensors and ultralong (>100km) lasing multiplexing networks will be presented.

Both Er-doped and Raman amplified systems will be shown, with special emphasis in our recent development in random distributed cavity lasers, internally modulated lasers.

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