

Séminaire Labex NanoSaclay

Le 13 juillet à 10h30 en 1C-50 au 3-5 lab

Frequency-shift Free Optical Phase Conjugation



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Abstract:

In this talk I'll present a novel scheme of optical phase conjugation with no shift in frequency or polarisation. Implemented in a mid-span spectral inversion set-up it is used for nonlinearity mitigation in standard single mode fibre network. The performance of mid-span spectral inversion under the effects of design parameters will be discussed.

P. Landais received a Ph.D. degree in Applied Physics from the Ecole Nationale Supérieure des Télécommunications, Paris, France, in 1995. His early work concerned the study of bistable and self-pulsating semiconductor lasers as all-optical functional components in fibre telecommunication systems. In 1996, he joined the Physics Department of Trinity College, Dublin, Ireland where he developed low-coherence semiconductor lasers for data storage and stabilized Fabry-Perot lasers. Between 1997 and 1999, he was involved in research activities on micro-cavity light emitting diodes under the European project SMILED. Between 1999 and 2000, he was development manager in CeramOptec Ltd, Ireland. Since January 2001, he has a tenure position in the School of Electronics Engineering, Dublin City University, Ireland. He is the inventor of 6 patents, 2 of which are currently licensed to Eblana Photonics Ltd. He is the authors of more than 100 scientific papers. Dr. Landais is a TMR Marie Curie Fellow since 1997 and a senior Member of IEEE since 2011. Currently he is the treasurer of IEEE UK & Ireland Section Joint Chapter ED15 (Electron Devices Society, Dublin) / PHO36 (Photonics Society, Ireland)

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