



UNIVERSITY OF CRETE
DEPARTMENT OF PHYSICS



QCN

CRETE CENTER FOR
QUANTUM COMPLEXITY
AND NANOTECHNOLOGY

ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday, 12 March 2015

17:00 -18:00

3rd Floor Seminar Room

**“Quantum wavelength division multiplexing:
a promising route to large scale quantum information
processing”**

Prof. Claude Fabre

Laboratoire Kastler Brossel
University Pierre et Marie Curie Sorbonne Universités

Abstract

We have generated by parametric down-conversion and fully characterized a highly multimode frequency comb with genuine quantum entanglement between its different frequency components that has promising applications in wavelength multiplexed quantum information processing.