



UNIVERSITA' DEGLI STUDI DI PAVIA

*DOTTORATO DI RICERCA IN FISICA*

## **COLLOQUIA 2015-2016**

**Giovedì 11 Febbraio 2016**

**Aula 102 "L. Giulotto", ore 16.00**

*Dipartimento di Fisica, via Bassi 6, Pavia*

### **Photons to the home: status of the art in optical access networks and forecasted optoelectronic component requirements**

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**Abstract:** The seminar will present the current status of optical access networks based on the Passive Optical Network (PON) architecture. PONs are today deployed worldwide to distribute ultra broadband content to many millions of homes. In the first half of the seminar, we will present the technologies that are currently commercially used (GPON and EPON) and the future trends (TWDM-PON and NG-PON3). Then we will focus the second half of the seminar on the optoelectronic components requirements for next generation PON network, with special emphasis on the option for low-cost Dense Wavelength Division Multiplexing (DWDM) components.

