Titolo: Boson sampling with integrated quantum photonics

martedì 13 febbraio alle ore 15.00 in Sala Lauree

si terrà il seminario del vincitore della procedura valutativa a prof. I fascia SSD FIS/01 (codice concorso 2016POR045), prof. Fabio Sciarrino

## Abstract:

Integrated photonic circuits have a strong potential to perform quantum information processing. Indeed, the ability to manipulate quantum states of light by exploiting integrated devices may open new perspectives both for fundamental tests of quantum mechanics and for novel technological applications, ranging from quantum cryptography to quantum simulation. Boson sampling is a computational task hard for classical computers, but efficiently solvable via bosonic interference in a specialized quantum computer. I will report on several experiments of boson sampling implemented with integrated quantum photonics.

Il Direttore, Paolo Mataloni