

2015 International Tyrrhenian Workshop on Digital Communications

Florence, Convitto della Calza

September 22, 2015

“Fiber Nonlinearities in Coherent Optical Communication”

Scope: The quest for higher spectral efficiency and data rate made possible by coherent techniques has to face the problem of fiber nonlinearities. Today, any design based on advanced techniques requiring knowledge of the statistical properties of the received signal is carried on either by simply neglecting the ensuing of nonlinearities or on simplifying assumptions. Moreover, major conferences on optical communication are generally focused on technological rather than theoretical aspects. Thus, we would like to propose a workshop laying special stress on in-depth theoretical investigation about the impact of fiber nonlinearities in coherent optical communication systems.

Structure: The workshop will be structured in 3÷4 sessions on specific topics, chaired by international experts in the field and, possibly, would be concluded by a panel discussion. The foreseen number of participants is in the order of 40÷50 people.

Location: The Workshop will be colocated with the 2015 Photonics in Switching (PS2015) conference (Sept.22-25, 2015), allocated in the first day of PS2015 in parallel with the symposia of the conference.

General Chairman: prof. Enrico Forestieri, Scuola Superiore Sant'Anna & CNIT