



UNIVERSITÀ
DEGLI STUDI
FIRENZE

“Shining light on cellular functions”

PROGRAMME

11:30: Colloquium

13:00: Lunch with the speaker (all participants are invited at LENS)

Enrico Fermi Colloquium

-Friday 10 Apr. 2015 11:30 am



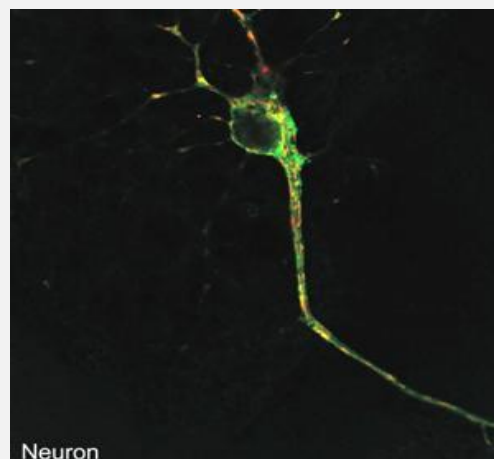
LENS - Via Nello Carrara 1

Sesto F.no (Firenze)

Conference room Querzoli



**Prof. Tullio Pozzan,
Full Professor of General
Pathology,
Department of
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University of Padua**



ABSTRACT

In multicellular organisms the coordinated functions of different organs is maintained through the continuous exchange of information among many different types of cells. This dynamic equilibrium is achieved through the controlled release of “messages” in the form of hormones, neurotransmitters, cytokines, etc. that, produced by one cell type, reach their targets on other cells and eventually modify their functions. The vast majority of these messages interact with receptors on the cell surface that in turn activate complex signals within the cell interior that are the final regulators of the specific cell response to the extracellular messages. Alterations in these intracellular signals are at the basis of most human diseases and many of the present pharmacological treatments have been designed to modulate these signals. In my presentation I will describe the approaches used to quantitatively monitor in living cells the dynamic changes of these signals in response to external messages using specific molecularly engineered fluorescent molecules that change their colour intensity or spectra in response to modifications in these intracellular signals. I will also describe a few examples of the use of these probes for the understanding of physiological or pathological processes.

Klein Colloquium by Giacomo Spagnolli: "Observation of Parity Symmetry Breaking Quantum Phase Transition in an ultra-cold atomic gas"





Enrico Fermi COLLOQUIUM



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