

Friday, 18th March 2016, 2:30 PM, Aula Magna

## Marco Genovese (INRIM)

## Quantum entanglement: from a conclusive test of Bell inequalities to quantum tech

Quantum entanglement has represented for more than 70 years a source of debate about foundations of quantum mechanics. This research culminated last year with the loophole free tests of Bell inequalities, confirming quantum non-locality. Furthermore, the development of these studies paved the way to practical applications addressed to developing new technologies based on peculiar properties of quantum states: the quantum tech. This offers an emblematic example of the success of "curiosity driven" research, leading to applications not imaginable or attainable with "goal oriented" research.