

COLLOQUIUM

PHYSICS, INFORMATION, AND THE NEW QUANTUM TECHNOLOGIES



Luiz Davidovich

Instituto de Física - Universidade Federal do Rio de Janeiro

15 de agosto, 2017, TERÇA-FEIRA

16h, Local: Auditório do IIF-UFRN

coffee-break às 15h30

Tuesday, august 15, at 4:00 pm at the IIP AUDITORIUM

coffee-break at 15:30

A new quantum technology, developed in several laboratories, has allowed the precise control of individual quantum particles, and has led to a new vision of the notion of information. Bold applications have been considered, based on subtle properties of the quantum world, such as the principle of superposition and entanglement, including cryptography and quantum computing. This colloquium will review the conceptual revolution brought about by these recent advances, with emphasis on the close relationship between new theoretical results and possible applications.