

Advanced course on quantum communication



N. Sangouard

CEA Researcher
Institute of Theoretical Physics, Paris-Saclay

Registration (no fee):

chris.galland@epfl.ch
and on ISA: **PHYS-758**

How to exploit quantum principles to advance communication technologies?

Doctoral course, 2 to 4 ECTS (depending on programs)

7 lectures, 4 x 45 min each (Mondays 2 - 5:30pm, Tuesdays 8:30 - 12 noon, PH H3 33)

Date	Content
Oct. 17/18	State, evolution & measurement Quantum principles, Entropic notions
Oct. 24/25	Quantum random number generation : principle and certification techniques
Oct. 31/Nov. 1	Quantum threat to classical cryptographic schemes Security proofs for quantum safe cryptography
Nov. 7	Prospects for global quantum communication networks

