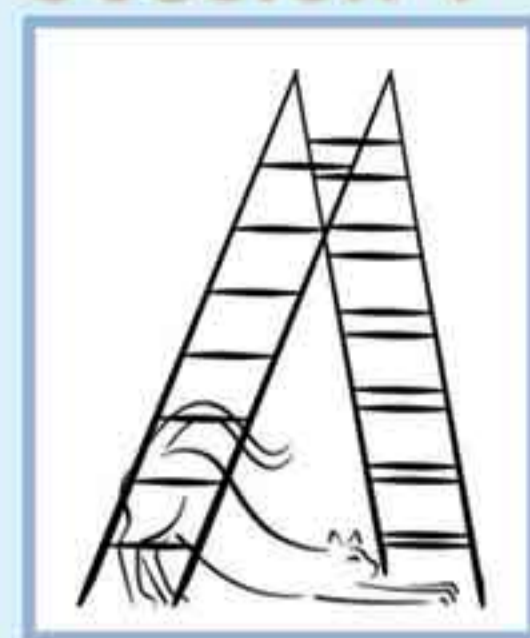


Session 1



Strong Light-Matter Coupling: from atoms to solid-state systems

21 May to 8 June 2012

Organisers

A. Auffèves (Institute Néel, CNRS, France)
D. Gerace (Univ. of Pavia, Italy)
M. Richard (Institute Néel, CNRS, France)
S. Portolan (Institute Néel, CNRS, France)
M. França Santos (Federal Univ. of Minas Gerais, Brazil)

Directors of the School

K. K. Phua (IAS, NTU, Singapore)
L. C. Kwek (CQT, Singapore)
C. Miniatura (CQT, Singapore and INLN-CNRS, France)

4 Fundamental Courses

CQED in atomic physics: **S. HAROCHE** (LKB-ENS, Collège de France)
Strong coupling in 2D semiconductors: **L.C. ANDREANI** (Univ. of Pavia, Italy)
Strong coupling in 0D semiconductors: **J.M. GÉRARD** (CEA-INAC, France)
Circuit QED: **S. GIRVIN** (Yale Univ., US)
Quantum Open Systems: **H. CARMICHAEL** (Univ. of Auckland, New Zealand)

9 Advanced Courses

Strong coupling in nanoplasmonics systems: **D. CHANG** (ICFO, Spain)
Experimental circuit QED: **P. BERTET** (CEA Saclay, France)
QDs coupled to cavities: **A. BADOLATO** (Rochester Univ.)
Ultrastrong coupling regime: **C. CIUTI** (Univ. Paris 7, France)
Photon-phonon strong coupling: **M. ASPELMEYER** (Univ. of Vienna, Austria)
Polariton BEC: **J. BLOCH** (LPN-CNRS, France)
Quantum polaritonics: **S. SAVASTA** (Univ. of Messina, Italy)
Cold-atom BEC in CQED: **I. CARUSOTTO** (BEC-Center, Univ. of Trento, Italy)
Atoms in strongly focused beams: **C. KURTSIEFER** (CQT, Singapore)

Scientific Objectives

The physics of strong light-matter coupling has been explored in different systems for the last three decades, ranging from atoms to semiconducting devices, and recently to superconducting circuits. It has led to essential demonstrations in many fields of research, from cavity quantum electrodynamics to photonics, from quantum communication and information processing to Bose gases in solid state systems. This school aims at developing the necessary interface between the different communities, by providing the future researchers with robust conceptual, theoretical and experimental basis on strong light-matter coupling, both in the classical and in the quantum regimes.

Registration

Registration will close on **9 January 2012**.

Thanks to financial support by various funding agencies, the school fees (which include housing, meals and the lectures book) are 1200 SGD per participant. A few additional grants (travel and waiver of registration fees) will be available. Due to limited funding, financial support will be awarded to the selected students on a first-come-first-serve basis.

For more information, please visit link -
<http://www.ntu.edu.sg/ias/SSOP/>

One can also contact the School -
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Sponsors



Supporting Institutes



Application Deadline

9 January 2012