Lectures Series: Theory of Open Quantum Systems

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In this short lecture course, I will glide through some basics of the theory of "Open

Quantum Systems".
Lecture 1: 10:30-ˇ11:30, Friday, 12 February @ B712, Lab 3

Quantum Master Equation in the Lindblad (GKSL)Form, derivation and simple examples. Kraus representation of the Open Quantum System dynamics.

Lecture 2: 15:00-ˇ16:00, Monday, 15 February @ B712, Lab 3
Coherent states for bosonic and spin systems. Glauber-ˇSudarshan P representation for dissipative dynamics of bosonic and spin systems. Fokker-ˇPlanck equation and its solution.

Lecture 3: 10:30-ˇ11:30, Wednesday, 17 February @ B712, Lab 3
Projection operator approach to the description of open quantum systems. Time local and time non-ˇlocal quantum master equations. Examples of exactly solvable Open Quantum Systems.

February
12th (Fri), 10:30-11:30
15th (Mon), 15:00-16:00
17th(Wed), 10:30-11:30
@CB712, Level B, Lab 3