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### Incoherent control of open quantum systems

Incoherent control exploits the environment as a control resource to manipulate open quantum systems. We are planning to review the use of incoherent light as a resource for incoherent control of atomic systems, in particular for engineering arbitrary pure and mixed quantum states, discuss the trap-free property of control landscapes for open quantum systems, control by back-action of quantum measurements and its relation to the quantum anti-Zeno effect, and other topics of incoherent control.

References: Phys. Rev. A 73, 062102 (2006); Phys. Rev. A 84, 042106 (2011); Europhysics Letters 91, 60005 (2010); Phys. Rev. A 74, 052102 (2006).

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