



## School on NEW TRENDS IN QUANTUM DYNAMICS AND ENTANGLEMENT 14 - 18 February 2011

## **QUANTUM CHANNELS WITH MEMORY**

3. Quantum Channels with Long-Term Memory

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## Abstract:

In this lecture we discuss examples of quantum channels with long-term memory, which lie outside the class of forgetful channels discussed in the previous lecture. In particular, we focus on the transmission of classical information through a particular example of such a channel with Markovian correlated noise. Other examples of long-term memory channels and their capacities are also discussed.