ICFO

SUMMER LECTURE: Quantum information theory with black boxes

ANTONIO ACIN

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12:00

Blue Lecture Room

Device-independent quantum information processing represents a new framework for quantum information applications in which devices are just seen as quantum black boxes processing classical information. This level of abstraction makes device-independent proto[1]cols especially relevant for cryptographic applications, as existing quantum hacking attacks become impossible. After introducing the key ideas and concepts needed for the definition of the device-independent scenario, we review the main results and open questions and dis[1]cuss how this new approach also sheds light on fundamental questions in quantum physics.

Hosted by: Academic Affairs