

Abstract

Plenary

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Zeno and the bomb

We will revisit the Quantum Zeno effect and its application for interaction-free channel discrimination. The first part of the talk discusses a generalization of the Quantum Zeno effect to time-dependent open-system dynamics interrupted by general quantum operations. The second part addresses the question when the Quantum Zeno effect of a general quantum channel enables interaction-free channel discrimination in the spirit of the Elitzur-Vaidman ‘bomb tester’.