

# Quantum Device Group

Sun, 2016-10-09 22:00 - [Benjamin Huard](#) [1] **Website:**  
[www.physinfo.fr](http://www.physinfo.fr) [2]

**Research Type:** Experiment

Our research group explores the physics of information in quantum integrated circuits, which we design, realize and measure. These objects can be viewed as quantum machines processing information. In contrast with ordinary circuits, in which quantum mechanics enters only at the level of individual electrons, the degrees of freedom of these machines at the signal level behave according to the laws of quantum mechanics. Topics of our current interest include amplification of quantum signals, manifestations of zero point fluctuations in circuits, quantum feedback, thermodynamics of quantum information, experimental tests of deviations to quantum theory, microwave quantum optics and quantum measurement.

**Leader:** Benjamin Huard

## Location

Ecole Normale Supérieure de Lyon 46 allée d'Italie  
Lyon 69007 France  
45° 43' 47.3376" N, 4° 49' 37.7724" E

- [Quantum Control](#) [3]
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- [Quantum Computation](#) [5]
- [Quantum Metrology, Sensing and Imaging](#) [6]

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