

Theory Lunch Webinar

Exploring quantum Hall effects and its exotic properties via quantum circuits

In our laboratory we are interested in asking and understanding fundamental questions in quantum many-body physics. In particular, we will mainly focus on the quantum Hall effects (QHEs) due to the availability of robust and tunable quantum states with fundamental and interesting properties. The QHEs, living in two-dimensions, harbor fractional charges (*anyons*), and provide building blocks for topological quantum information processing. However, the believed exotic characteristic of anyons, which makes them highly attractive, is yet to be experimentally verified.



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<https://www.epfl.ch/labs/lqp/>

Electrical probes, which are extensively used, oftentimes fail to elucidate the hidden character, such as the topological-order, of the system. While thermodynamic measurements offer complementary and important information, they are by far not as trivial as electrical characterization. In this talk, I will discuss our efforts in these directions.

Wednesday, October 28th 2020 at 12:30

Sandwiches available at 7th floor cafeteria from 12:15

Zoom : <https://epfl.zoom.us/j/8396293408>