

## **An Introduction to Quantum Fields and Local Measurements**

*jeudi 4 avril 2024 11:00 (1 heure)*

An introduction to quantum field measurement in the local covariant framework of quantum field theory will be given. Concepts such as the local dynamical coupling between “system” and “probe” will be discussed, as well as selective and non-selective

state updates following probe measurements. Furthermore, Sorkin’s impossible measurement scenario will be sketched, and it will be argued that the impossible measurements of this scenario are also present in classical relativistic field theory. The material of this talk is based on joint works with C.J. Fewster (arXiv:1810.06512 and 2304.13356) and with A. Much (arXiv:2308.16673).

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