## Interpretations

## Simon Mathis, Nuriya Nurgalieva, Lídia del Rio, and Renato Renner

Institute for Theoretical Physics, ETH Zürich, 8049 Zürich, Switzerland September 16, 2019

By the interpretation here we understand a particular way in which agents apply a theory to yield predictions about other agents' outcomes.

**Copenhagen interpretation** We have already shown an example of an application of the Copenagen interpretation in the analysis we have conducted when describing the paradox in Frauchiger-Renner thought experiment. This result is derived under following assumptions:

- 1. (Q) Agents use a weaker version of Born rule, applicable only to deterministic outcomes, to formulate their predictions;
- 2. (S) Agents experience only one outcome;
- 3. (C) Agents reason from viewpoints of each other;
- 4. (U) Agents assume unitary evolution in each others labs.

Further discussion on the assumptions can be found in [??].

Collapse		