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## **Probing the Sub-Quantum with Weak Measurements**

In recent years, it was realized that weak measurements on many copies of a system can be used to directly extract its quantum features. In a deterministic view of quantum theory, such as Bohmian mechanics, one can even acquire information that is normally inaccessible — for example, measuring simultaneously the position and momentum of a particle. This allows the direct measurement of Bohmian trajectories. I will discuss how the sub-quantum features revealed in these trajectories bring into focus the non-local nature of quantum theory and highlight its essential strangeness, as well as pave the way toward an understanding of the qualities of post-quantum theories.

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