

# The Time Machine Factory [unspeakable, speakable] on Time Travel -TM2019



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## Locality and causality in the Aharonov-Bohm effect

*Wednesday, 25 September 2019 14:20 (40 minutes)*

I will expose a local, fully quantum-field-theory compliant model of the Aharonov-Bohm effect, where the Aharonov-Bohm phase is gradually and locally acquired. I will explore the theoretical and experimental implications of this model, especially in regard to locality and causality in quantum theory.

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**Session Classification:** Investigating the fundamental properties of physics