



Contribution ID: 12

Type: **not specified**

## Time Travel Paradoxes and Entangled Timelines

*Friday 22 September 2023 11:05 (30 minutes)*

It seems that if time travel is possible, it is inevitable to encounter paradoxes. These paradoxes include consistency paradoxes, such as the famous grandfather paradox, and bootstrap paradoxes, in which something is created out of nothing. The concept of parallel timelines is suggested to address these paradoxes, and a model called “Entangled Timelines” or E-CTCs is proposed to explain the mechanism by which timelines can be created. This mechanism is based on the Everett or “many-worlds” interpretation. In this research, we endeavor to expand upon the existing model by exploring various scenarios, including multiple time machines, an infinite number of timelines, non-cyclical timelines. Additionally, we investigate the consequences of a part of an entangled system and particles in superposition accessing the time machine.

**Author:** Ms VALENCIA ZUÑIGA, GABRIELA ALEJANDRA (Universidad del Valle)

**Presenter:** Ms VALENCIA ZUÑIGA, GABRIELA ALEJANDRA (Universidad del Valle)