



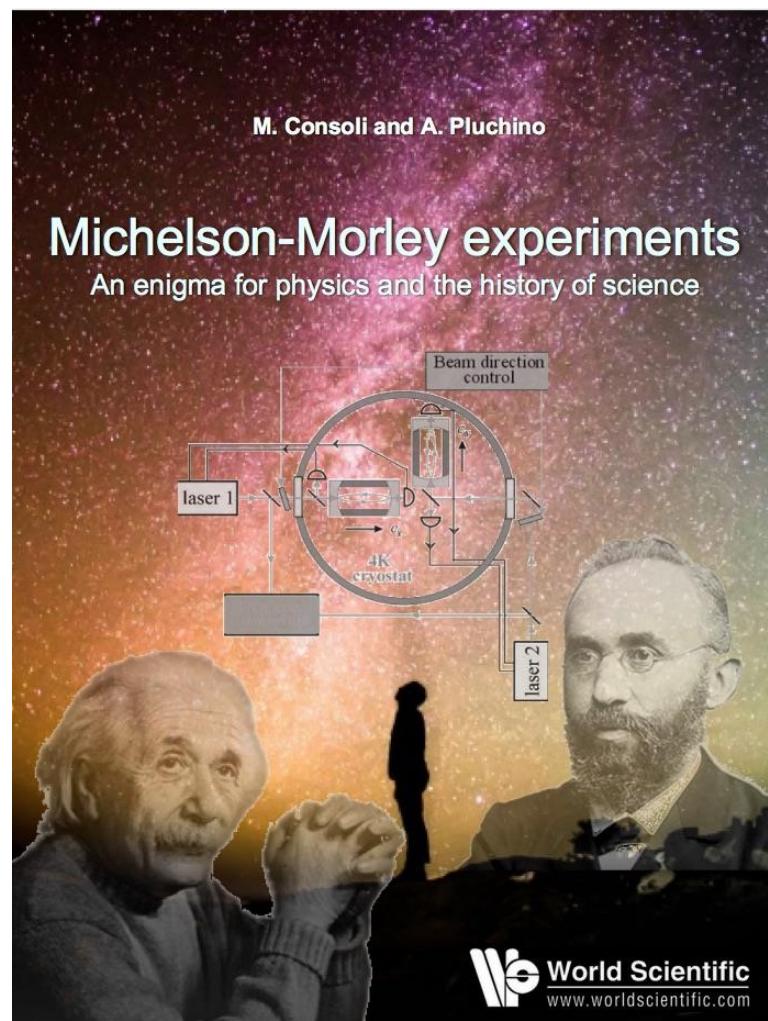
Michelson-Morley Experiments: An Enigma for Physics and the History of Science.

Tuesday, 8 Nov., 2022

Auditorium & Webcast 16:00 h

Maurizio Consoli (INFN, Catania, Italy)

The “null result” of the Michelson-Morley experiment represents a fundamental step for physics and the history of science. Since then, more and more precise measurements have apparently strengthened the original interpretation. However, in principle, if the two-way velocity of light in the interferometers is not exactly the same parameter “ c ” of Lorentz transformations, nothing would prevent a non-zero effect. For instance, in a gaseous medium the small fraction of refracted light could keep track of the motion of matter with respect to some preferred reference frame. Starting from this observation, there is now a new interpretation where the small irregular residuals observed in laboratory show intriguing correlations with the direct CMB observations with satellites in space. This opens the possibility of linking the CMB to a fundamental reference system for relativity with substantial implications for the interpretation of non-locality in the quantum theory. The Colloquium will focus on the basics of this research with brief notes on some leading scientists involved in these measurements.



Please note:

This is a HYBRID colloquium!
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