

Seminarium Zakładu Fizyki Teoretycznej

Departament Badań Podstawowych

Narodowego Centrum Badań Jądrowych

Oct 27, 2021 (Wednesday), h. 14:15

The seminar is held online:

https://www.gotomeet.me/NCBJmeetings/bp2_seminar

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"Physical implications of a fundamental period of time"

ABSTRACT:

If time is described by a fundamental process rather than a coordinate, it interacts with any physical system that evolves in time. This talk will introduce the resulting dynamics and show that it is consistent with observations provided the fundamental period T is sufficiently small. Using the current accuracy of atomic clocks, an upper bound of $T < 10^{-33}$ s is obtained, which is five orders of magnitude below distance measurements at high-energy accelerators. A fundamental period of time could also have additional implications for lab experiments or cosmological observations.

Note the unusual time.