



PHYSICS AND ASTRONOMY COLLOQUIUM

Dr. Martin Bojowald

Penn State

“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 $T < 10^{(-33)}\text{s}$ is obtained, which is five orders of magnitude below direct distance measurements at high-energy accelerators. A fundamental period of time could also have additional implications for lab experiments or cosmological observations.”

Wednesday, October 21, 2020

3:30 p.m.

via Zoom: <https://uvic.zoom.us/j/99605059029>