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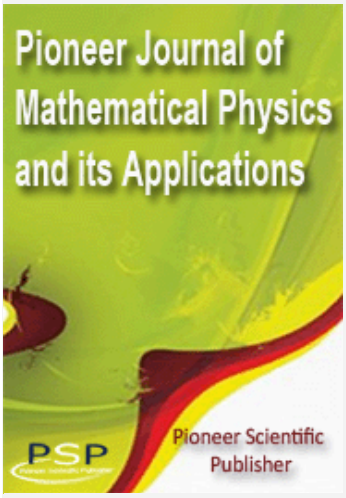

A NOTE ON ASTROMETRIC DATA AND TIME VARYING SUN-EARTH DISTANCE IN THE LIGHT OF CARMELI METRIC

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Abstract

In this note, we describe shortly time varying Sun-Earth distance in the light of Carmeli metric and compare the result with recent astrometric data. The graphical plot suggests that there should be linear-linear correspondence between Sun-planets distances and their time variation. Carmeli metric simply adds a momentum term to the normal 4-d spacetime formulation, to give us a 5-d working space, but actually the original Carmeli metric replaces time dimension in Minkowski metric to become momentum term divided by quadratic Hubble constant. One obvious advantage from Carmeli metric is that it can be used to derive Tully-Fisher law, which can explain galaxy motion without invoking dark matter.

Keywords and phrases: Carmeli metric, time dimension in Minkowski metric, Sun-Earth distance.