

Review of: "Geodesics as Equations of Motion"

David Delphenich

Potential competing interests: No potential competing interests to declare.

Since the essence of the argument that the author is posing seems to be based upon the difference between time, the coordinate, and proper time, the curve parameter, and how that relates to internationally-established standards for the definition of time, I think it is worth pointing out that Max Born once observed that all measurements are performed in the rest space of the measuring device. Thus, the time scale for any measuring device will be proper time, while the time coordinate is more relevant to the observed time scale for something that is in a state of relative motion with respect to the measurer/observer. One would assume that international standards are intended to be useful to experimenters, more than theoreticians, so an SI unit of time would relate to the time scale of experimental measuring devices, i.e., proper time.

Based upon the comments of the other reviewer, one must, however, concede that the question that was posed is worthy of debate, although typically any argument whose conclusion amounts to "Einstein was wrong" will always provoke skepticism. It's a bit like finding a bug in the Windows operating system; it's always possible, but generally unlikely.