

Review of: "Does the Time Dimension has to be Perpendicular to the Space-Dimensions?"

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Potential competing interests: No potential competing interests to declare.

The author claims "Rejecting the assumption regarding the perpendicularity of the time dimension to the spatial dimensions of the observers' reference frame seems to be a way to solve unsolved problems for 120 years and extend the capacity of the model of reality."

First, you probably mean in an inertial system. In such system all spatial directions are the same. If the time axis has a spatial component, this define a preferred direction in the inertial system, which does not exists. So, the idea is wrong.

On the other hand, when there is a gravitational field in your spacetime, there are models of spacetime, where the time axis is not perpendicular to the space, but in this case there is a preferred direction- the direction of the field.