Modern SpaceTime and Radar Ranging

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In the articles MST (Modern SpaceTime) MST and Planck's Constant and MST and Mass Definition at this site, http://physics.trak4.com/
finite quantities such as "x^0, x^i, x^u" were used in mathematical physics applications and needs to be clarified.
Radar ranging is used to determine finite lengths and that includes interferometry. Let me begin with this definition of an invariant *finite* spacetime interval, (with a caveat),

$$X^2 \;=\; g_{uv}\; x^u\; x^v \quad ,\; \{u, v = 0, 1, 2, 3\} \tag{1}$$

Caveat: where the Riemann-Christoffel tensor

$$R_{abcd} \;=\; 0 \textit{ to compute } X \;,\quad \{a, b, c, d \;=\; 0, 1, 2, 3\} \tag{2}$$

thus enabling the metrics "g_{uv}" to be constant and transformable to the unit values defined by MST,

$$g00 \;=\; g11 \;=\; g22 \;=\; g33 \;=\; 1 \tag{3}$$

to radar range an object at rest, to produce,

$$X^2 = \;(ct)^2 \;+\; x^2 \;+\; y^2 \;+\; z^2 \tag{4}$$

$$= (ct)^2 + r^2 \tag{5}$$

Because of Eq.(2), the following holds,

$$X^2 = x_u x_u \tag{6}$$

$$= x^u x^u \tag{7}$$

and I think, provides a good working definition of finite length and time in orthogonal MST. In Eq.(4), using radar ranging, ct =r and X is the one way spacetime interval to the target at rest.