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We can measure any distance or any amount of time with a most primitive clock and a most primitive ruler: A space-time version of Tyszka's result.
(English)

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In 1953 F. S. Beckman and D. A. Quarles jun. proved that every bijection of R^n into itself ($n \geq 2$) which preserves distance 1 is an isometry. This result has its analogue for the Minkowski space-time (Schröder 1979, Benz 1981, Benz 1983, Rado 1983, Samaga 1984, Schaeffer 1986). In 1996 a discrete version of the Beckman-Quarles theorem was proved by A. Tyszka for $n = 2$.

The present paper concerns an analogue of the discrete version for the Minkowski 2-dimensional space-time.

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