

## ARBITRARY SPACE

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The well-known Lorentz transformations are controversial and misunderstood. They are based on the Michelson interferometer:

$$\begin{aligned}\tau &= \beta \left( t - \frac{v}{V^2} x \right) \\ \xi &= \beta(x - vt) \\ \eta &= y \\ \zeta &= z \\ \beta &= \frac{1}{\sqrt{1 - \left(\frac{v}{V}\right)^2}}\end{aligned}$$

According to these simple formulas, the longitudinal time is delayed and the longitudinal space is stretched. But according to the theories of Lorentz and Einstein - the longitudinal space is shrunk.

Einstein obtains a shrunk space in TSR, only after transforming the Lorentz transformations themselves, by inverting them arbitrary, but misses to invert the time into accelerated.