

## عنوان مقاله:

On-shell Equation of the Lorentzian Classicalized Holographic Tensor Network

## محل انتشار:

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## نویسنده:

Eiji Konishi - *Graduate School of Human and Environmental Studies, Kyoto University*

## خلاصه مقاله:

In the Lorentzian classicalized holographic tensor network (cHTN), we derive its relativistic on-shell equation from its Lorentzian action in the presence of a relativistic massive particle in the bulk spacetime:  $-\sigma \hbar \bar{\theta} = Mc^2$ . Here,  $\sigma$  is the von Neumann entropy of the cHTN per site in nats,  $\bar{\theta}$  is the real-proper-time expansion of the cHTN defined along the world line of the particle, and  $M$  is the non-zero mass of the particle. We explain the physical properties, interpretation, and consequences of this equation. Specifically, from this equation we derive the properties of the on-shell proper acceleration of another massive particle in the bulk spacetime as those of the gravitational acceleration induced by the original massive particle.

## کلمات کلیدی:

Holographic Principle, Quantum Entanglement, Holographic Tensor Network, Classicalization

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1774425>

