

(It is Not written by T. Jacobson. It is based on a related paper arXiv: 1505.04753)

We show that the semiclassical Einstein equation holds if and only if the entanglement entropy in small causal diamonds is stationary at constant volume, when varied from a maximally symmetric vacuum state of geometry and quantum fields. The argument hinges on a conjecture about the variation of the conformal boost energy of quantum fields in small diamonds.

<http://online.kitp.ucsb.edu/online/qgravity15/>