

## Why Planck Foam Violates Special Relativity

Terry Bollinger

2022-08-02.17:11 EDT Tue

<https://www.youtube.com/watch?v=snp-GvNgUt4&lc=Ugy0INWL1fauWhPINg94AaABAq>

*Comment on YouTube PBS Space Time post:*

Can Space Be Infinitely Divided?

<https://youtu.be/snp-GvNgUt4?t=10m33s>

10:33 – "In the same way that you get virtual particles on subatomic scales, on the Planck scale you get virtual spacetime fluctuations ... the spacetime foam." No. Impactful virtual particles, e.g., nuclear charge shielding pairs, form only in rest-mass frames energetic enough to host them. Wheeler's foam is an infinitely energetic, pre-SR ether.

-----

Terry Bollinger [CC BY 4.0](#)

2022-08-02.17.11 EDT Tue

PDF: <https://sarxiv.org/apa.2022-08-02.1711.pdf>