

Review of: "Non-dimensionalization of the Compressible Navier-Stokes Equation by Pressure Wavelength and Period revealing its Singularity"

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Potential competing interests: No potential competing interests to declare.

This paper established the traveling wave phase function as an invariant dimensionless scalar, leading to time dilation and length contraction in special relativity. Using wavelength and period as scaling parameters ensures a consistent mathematical description for inertial reference frames. Similarly, non-dimensionalizing the Navier-Stokes equation in a comoving reference frame involves pressure, wavelength, and period as scale parameters, yielding a Reynolds number with wavelength as the length scale and wave speed as the characteristic velocity.

Overall, I find this work to be engaging, prompting curiosity and a desire to delve deeper into the content.

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