

# 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.

- While the paper provides an innovative approach for non-dimensionalising the compressible Navier-Stokes equation using the wavelength and period as scaling parameters, it's recommended to include comparisons with existing literature on this topic for a broader context.
- The paper offers valuable insights into the nature of wave propagation and its relationship to fluid mechanics, relativity theory, and thermodynamics.
- The discussion on the relation between wavelength, period, and wave phase velocity is well presented.
- The equations and derivations are well-organized and easy to follow.
- The discussion on mass-energy equivalence and its relationship to wave potential energy is well presented.
- The paper provides a clear and concise mathematical description of the plane wave for all inertial reference frames, considering the covariant relationship between time, length, wavelength, and period.
- While the paper is generally well-written, there are some areas where the language could be made more concise and precise.
- While diagrams are helpful, some of them could benefit from more detailed labeling and explanation to help readers better understand their significance.