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

Padmavathi Thiyagarajan[1]

1 Saveetha University

Potential competing interests: No potential competing interests to declare.

Thank you for the invitation. This article offers a novel method for non-dimensionalizing the compressible Navier-Stokes equations with pressure wavelength and period. This novel method seeks to shed light on the singularity inherent in the compressible flow regime, providing fresh insights into fluid dynamics at high Mach numbers. The work focuses mostly on theoretical analysis and mathematical derivation, with no experimental validation or empirical verification of the suggested method. Experimental experiments or numerical simulations that validate the singularity shown by the non-dimensionalized equations will increase the credibility and usefulness of the findings. Improved clarity in conveying essential concepts and assumptions, as well as extra explanatory figures or examples, may make the article more accessible to a bigger readership.