Three-Dimensional Flow of Nanofluid over a Non-Linearly Permeable Shrinking Sheet.

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- **Abstract:** The nanofluid flow past a permeable non-linear shrinked surface for three-dimensional case is considered in this paper. The governing equations are first modelled, and the similarity transformation technique is conducted with the aim to obtain a set of nonlinear ordinary differential equations systems from the nonlinear partial differential equations form. The solutions are attained numerically by solving the obtained similarity equations and then solved by the shooting approach. The physical explanation on the impact of the governing parameters is presented through tables and graphs. The influences of the governing parameters on the local Reynolds number in x and y direction, local Nusselt number along with the velocity profiles have been discussed. Additionally, this present problem also discovered the existence of dual solutions. The obtained result has been compared with previous open literature results and it is revealed to be in good agreement.
- Keywords: transformation technique ,three dimensional, literature results