On the existence, uniqueness, and new analytic approximation of the modifieded error function in two-phase Stefan problems

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Abstract

The existence and uniqueness of the solution is proved for a nonlinear boundary value problem for ODE subject to an infinite condition (missing citation), which describes the study of two-phase Stefan problems on the semi-infinite line $[0,\infty)$. This result considerably extends the analysis of a recent work (missing citation). A highly accurate analytic approximate solution of this problem is also provided via the Adomian decomposition method.

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Figure 1 (tex).tex available at https://authorea.com/users/343851/articles/470437-on-the-existence-uniqueness-and-new-analytic-approximation-of-the-modifieded-error-function-in-two-phase-stefan-problems

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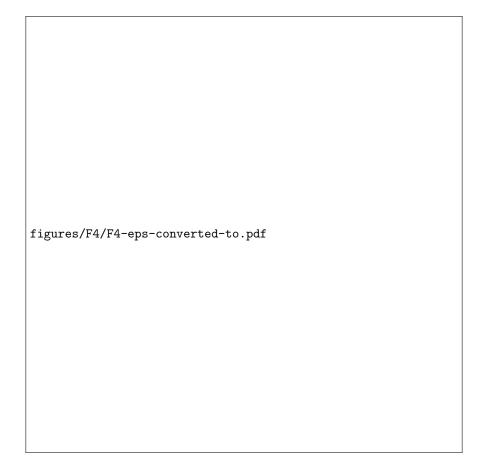
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References