UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

SOLVING BLASIUS EQUATION USING SEMI ANALYTIC ITERATIVE METHOD

P11S18

NURUL ATIKAH BINTI HALMI
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Bachelor of Science (Hons.) Computational Mathematics
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ACKNOWLEDGEMENTS

IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

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ABSTRACT

The semi analytic iterative method was applied in this research to solve two forms of Blasius equations. Blasius equation is known as a basic unsolidified dynamics equation. Many methods were approached to solve this problem but a new method has been conducted to resolve this difficulty which is semi analytic iterative method (SAIM). Variational iterative method (VIM) and Iteration method existing results was chosen to be compare with SAIM expectation outcomes. To manage the boundary condition at finite, Padé approximations and simple series approximations are combined in first form and second form of Blasius equation from that a series solutions was obtained. Based on the algorithm, the most accuracy and efficiency results were successfully demonstrated.