

**COMPARATIVE STUDY OF COLLOCATION METHOD AND
GALERKIN METHOD FOR SOLVING NONLINEAR PARTIAL
DIFFERENTIAL EQUATION**

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DECLARATION BY CANDIDATE

We ascertain that the project and this report which it refers that is on our production and every concept and reference from the work of other people that are advertised are fully unquestioned correspond with the guideline implying practices of the discipline



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ABSTRACT

A lot of essential consciences substantial and synthetic experience can be described by Partial Differential Equation (PDE). These Galerkin method (GM) and Collocation method (CM) are used to solve some examples of nonlinear Partial Differential Equation (PDE). The particular times is used in these methods because it can influence the collected result from the solution to be compared in terms of convergence study and the accuracy of the numerical solution. Error percentage is calculated of these both method to get the best method for solving nonlinear PDE. Maple 18 program have been advanced based on the analysis in order to solve the PDE.

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