

The finite element laminar flow modelling with backward facing step test

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SUMMARY

The finite element method has been developed for laminar flow modelling of incompressible viscous fluid utilizing quadrilateral isoparametric elements. The Galerkin weighted residual method has been chosen with discretization of directional derivative of velocity. Two test cases of two-dimensional flow over a backward facing step, for low and high Reynolds numbers are solved. The results are compared favourably with the literature.
