

Flow Simulations by a Particle Method Using Logarithmic Weighting Function

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Summary

The application of a particle method to incompressible viscous fluid flow problems is presented. The method is based on the MPS (Moving Particle Semi-implicit) scheme using logarithmic weighting function. Numerical results demonstrate the workability and the validity of the present approach through incompressible viscous fluid flow in a driven cavity and flow behavior in a liquid ring pump with rotating impeller blades.

