

Possibilities of parallel calculations in solving gas dynamics problems in the CFD environment of FLUENT software

Gil'fanov A., Zaripov T.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The results of studying an incompressible gas flow field in a periodic element of the porous structure made up of the same radius spheres are presented; the studies were based on the solution of the Navier-Stokes equations using FLUENT software. The possibilities to accelerate the solution process with the use of parallel calculations are investigated and the calculation results under changes of pressure differential in the periodic element are given. © Allerton Press, Inc., 2009.

<http://dx.doi.org/10.3103/S1068799809010103>
