
Titel des Beitrags: A coupling algorithm for high order solids and lattice Boltzmann fluid solvers

Abstract: In this paper the implementation of the bidirectional coupling approach for the partitioned Lattice Boltzmann (LB) fluid flow and Finite Element (p-FEM) structural mechanics solver will be discussed. Earlier research on a benchmark configuration showed that the explicit coupling algorithm of the two methods was prone to instabilities for some configurations. For this purpose an implicit coupling algorithm was designed and is presented in this paper.


Verlag / Institution: P. Wesseling, E. Onate and J. Periaux, editors

Verlagsort: TU Delft, The Netherlands

Jahr: 2006

Occurences:
- Einrichtungen > Fakultäten > Ingenieurfakultät Bau Geo Umwelt > Lehrstühle > Leonhard Obermeyer Center > Lehrstuhl für Computation in Engineering (Prof. Rank) > Konferenzbeiträge > Proceedings

entries: