CALL FOR PAPERS

EABE Special Issue on "Coupling techniques"

Numerical methods have consistently evolved over the last decades, and a multitude of techniques is now available for analyzing different physical phenomena. Although some of those methods are generic, and can be used in the analysis of different classes of problems, it is impossible to find one specific method that can be considered the best choice for all types of analyses. Thus, it is common to find situations for which the best choice is to make use of more than one method to find an accurate solution, and thus it becomes necessary to establish efficient coupling strategies between them. Classic examples of such situations occur in multiphysics problems or in solid-fluid interaction problems. Devising efficient coupling strategies is, however, not an easy task, and straightforward techniques, such as those involving direct coupling between the used methods using a single behavior matrix, can lead to specific problems; indeed, problems related with ill-conditioning or huge computational requirements have been reported. In this special issue we are interested in the most recent advances concerning coupling between different methods or physical processes. Researchers working in this field are therefore invited to submit original works that may contribute to improve current knowledge in this area.

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