

COUPLING STRATEGIES IN MULTI-PHYSICS CODES

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ABSTRACT

The session is conceived as a place to openly present ideas related to the difficulties and solutions found when coupling different solvers in the framework of a multi-physics code.

When programming the coupling between two, three, or more physics solvers, many decisions need to be taken, including how to couple them, in what order, level of strength, accuracy, etc. Different multi-physics codes adopt different solutions and even inside the same multi-physics code different couplings may use different solutions. Also, there exist more abstract approaches where each solver is considered an object and the coupling is a super-object, capable of working with different combinations of solvers.

All these aspects are welcome to be presented in the session, aiming at exchanging ideas, knowledge or at opening later discussions.

Speakers coming from both open source and commercial multi-physics codes are going to present their talks.