

## MS 16

### Advances of temporal coupling schemes for multi-physics problems

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Numerical methods for computing multiphysics problems are diverse. Partitioned approaches solve the single-field problems separately by exchanging information, e.g., at a common interface in the case of fluid-structure interaction. These methods are attractive because linking existing solvers to create an overall solver is possible with little effort. The central aspect of the required development is the temporal coupling of the single-field solvers.

The goal of this minisymposium is to discuss the progress and recent achievements in temporal coupling schemes for multiphysics problems. Although not limited to, potential applications for such methods could be: aerospace, maritime, civil, biomechanical, and production engineering. The focus is on new innovative methods and algorithms leading to faster, more accurate predictions and improved partitioned solvers. The range of methods intended includes the development of novel iteration methods, e.g., quasi-Newton methods for interfaces, time-splitting methods, parallelisation, etc.