Roland Becker

Institute of Applied Mathematics, Université de Pau et des Pays de l'Adour, France

Finite element methods for interface problems

Interface problems arise in many applications involving heterogenous materials, such as contact problems and immiscible two-phase flows.

In some situations, non-matching meshes provide an interesting technique. In others, like moving interfaces, avoiding meshing of the interface is desirable.

In this talk, we describe some methods for these situations, and investigate relations between the mortar and Niitsch-based methods.