Invited session:

# *Static and Moving Geometries as Modeling and/or Control Variables*

Organizers:

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Geometry is an integral element in the modeling of static and dynamical physical systems. In static systems, it is the underlying domain over which a partial differential equation is prescribed; in the theory of thin and asymptotic shells, it is the specification and the smoothness of the mid-surface.
Yet, the geometry can also become an optimization or control variable as in free or moving boundary problems or in problems where the solution of the partial differential equation is controlled by moving part of the boundary of the domain. This session presents some new developments in this very active research area with an growing impact on technological and medical applications.