## **MESH PROCESSING AND APPLICATIONS**

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## ABSTRACT

Meshes have been central objects in scientific computing since the early days of the discipline, as the main numerical representation of surfaces or domains when it comes to their visualisation or to the simulation of related physical phenomena. Beside this original purpose, which is just as topical as ever, the ubiquitous use of meshes has raised a wide variety of modern issues, such as the need for adapting the size and orientation of their elements, for accounting for their movement along a prescribed vector field, to name a few.

This session is concerned with both fundamental and applied aspects of the processing of meshes, including their generation, their modification and their realistic use in various contexts, for instance in the numerical resolution of physical or mechanical partial differential equations, in computer graphics, inverse problems, etc.

## REFERENCES

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- 2. P. Frey and P.-L. George, *Mesh generation: application to finite elements*, Wiley-Iste, (2007).