MESH REDUCTION METHODS

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SUMMARY

The aim of the mini-symposium is to gather researches interested in the development and applications of mesh reduction methods. The mesh reduction methods are used to simplify or eliminate the mesh required for the analyses. They are particularly suitable for problems with large deformation, moving boundaries and multiple contact of complicated geometry. Generally they can be classified into domain and boundary type methods, which evolved from the finite difference and finite element method or the boundary element method. Works showing applications in solid, fluid and aeromechanics, strength analyses, heat transfer, coupled problems, etc. are welcome.

Methods of interest include, but are not limited to:
- boundary element method,
- fast multipole boundary element method,
- parametric integral equations methods,
- dual and multiple reciprocity method,
- method of fundamental solutions,
- Trefftz method,
- local Petrov-Galerkin method, etc.