**PaMPA**: Parallel Mesh Partitioning and Adaptation

Parallel middleware library for remeshing and redistributing unstructured, heterogeneous meshes.

PaMPA dramatically eases and speeds-up the development of parallel numerical solvers for compact schemes.

**Technological barrier** PaMPA combines multiple sequential remeshing tasks to perform dynamic parallel remeshing and redistribution of very large unstructured meshes (e.g. remeshing from 2.4 to 115 Melements in 21m on 24 procs)

**Possible fields of application**: Generation of very large, high quality meshes. Running of very large scale parallel simulations on static or dynamic meshes.

**Language, environment**: interfaces C(C99) and fortran (F90 + Iso C Binding F03), MPI+Pthreads, environment POSIX (Linux, MacOS, Windows)

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**Keywords**: parallel remeshing, subdomain decomposition, dynamic load balancing, unstructured heterogeneous meshes, parallel numerical solvers

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