

PARALLEL IMPLEMENTATION OF A CHIMERA METHOD

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Abstract. The Chimera method was first envisaged as a tool for simplifying the mesh generation. Independent meshes are generated for each component of the computational domain, enabling a flexibility on the choice of the type of element as well as on their orientation that could not be possible when meshing complex three dimensional geometries. The Chimera method is very useful when these components are moving or when they can take different locations for optimization purpose. We present a parallel implementation of an implicit Chimera method based on Dirichlet/Robin and Robin/Robin method for the case of steady subdomains.