

# Mesh Generation in GMSH : a roadmap

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<http://www.geuz.org/gmsh>

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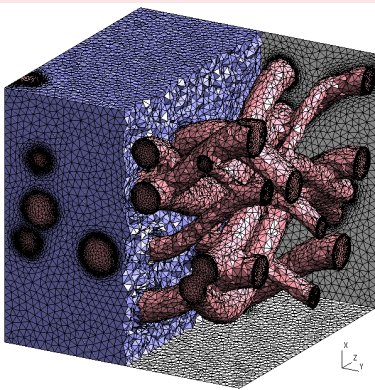
## What is available in Gmsh

- Surface meshing
  - Three in-house (standard) algorithms: meshadapt, Delaunay and frontal
  - Two quad-oriented algorithms: delquad and square packing
  - Blossom-quad !



## What is available in Gmsh

- Anisotropic meshing
  - Anisotropic mesh generation
  - Bamg (F. Hecht) for 2D
  - MMG (C. Dobrzynski) for 2D
  - All available



## What is available in Gmsh

- Boundary Layer Meshing
  - Standard BL mesh definition
  - Available in 2D (stable)
  - Clearly nr 1 in the to do list: 3D BL meshes!
- Hex Meshing
  - DOMHEX project
  - Hex dominant (done)
  - Full Hex (nearly done)
- Periodic Meshing
  - Translation – rotation
  - Generation of periodic outputs
- Curvilinear meshing
  - IDIHOM project
  - Jacobian bounds available
  - optimization

## What will be available in Gmsh in 1 year

- Boundary Layer Meshing (nr 1 priority)
- Large Scale Meshes
- Curvilinear meshes (continued)
- Quad/Hex meshes (continued)