## Functions

join\_triangle\_with\_large\_angle(mesh)

For each mesh TRIANGLE with an angle A bigger than 120°, delete the longest mesh edge the one opposite A,) joining the triangle to the cell on the opposite side.

collapse\_shortest\_edge\_for\_small\_angle\_cell(mesh)

For each mesh TRIANGLE with an angle A” smaller than 30° but no angles bigger than 150°, collapse the shortest mesh edge (the one opposite A”.)

split\_all\_cells(mesh)

Split every mesh cell with more than three vertices until the entire mesh is a triangle (split the mesh cell from the cell vertex with maximum angle).

## Algorithm

split\_all\_cells(mesh)  
old\_triangles = mesh.NumCells()  
  
for iteration in range(10):  
 join\_triangle\_with\_large\_angle(mesh)  
 split\_all\_cells(mesh)  
 collapse\_shortest\_edge\_for\_small\_angle\_cell(mesh)  
 if old\_triangles == mesh.NumCells():  
 break