

# Question 16

**Q:** How much size is optimal for meshes?

(Electromagnetic analysis/Hertz/Mesh)

**A:** The optimal size of meshes varies depending on the analysis type and intended accuracy. A rough standard for an optimal mesh size is typically 1/6 to 1/8 times the wavelength.

Femtet implements adaptive meshing for user convenience.

Multiple frequencies can be set for the calculation of adaptive meshing.

Adaptive Mesh Setting

General

Maximum Number of Iterations: 5

Minimum Number of Iterations: 0

Element Incremental Rate: 30 [%]

Property to Judge the Convergence: Automatic

Apply Adaptive Meshing at reference frequency  
 Set frequency to apply Adaptive Meshing

Tolerance: 2.0 x10<sup>-2</sup>

Adaptive Mesh Setting

General

Maximum Number of Iterations: 5

Minimum Number of Iterations: 0

Element Incremental Rate: 30 [%]

Property to Judge the Convergence: Automatic

Apply Adaptive Meshing at reference frequency  
 Set frequency to apply Adaptive Meshing

Frequency	Tolerance
1	2.0
2	2.0
3	2.0

Exp: 9 [-2]

Unit: [Hz] [-]