

# Table of Contents

<b>Tetrahedral meshes</b> .....	1
---------------------------------	---



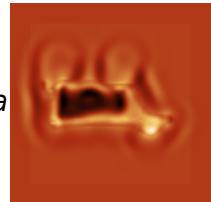
## Tetrahedral meshes

To create more complex meshes one can use also tetrahedral mesh, which can be obtained (with one intermediate step) from 3D modeling software, like [Blender](#). Software tools for 3D modeling usually do not provide mesh itself, however they can save some files, e.g. in STL format that can be directly used for mesh generation. Then, a mesh generating software is used, like [Tetgen](#). This outputs .node and .ele files that GSvit can read.

---

Sample parameter file: [cow](#).

A 300x300x300 computational domain with cow model, hit by total/scattered field source. The original model used for creating the mesh was provided courtesy of Yutaka Otake by the [AIM@SHAPE Shape Repository](#).



---

Note that the mesh creation, namely the conversion from your favorite 3D modeler via Tetgen can be sometimes complicated process. In general it is good to start with simple objects and if the whole toolchain works, increase the complexity.

Here is an example of the procedure step-by-step, for much simpler object than a cow.

From:  
<http://www.gsvit.net/wiki/> - **GSvit documentation**

Permanent link:  
[http://www.gsvit.net/wiki/doku.php/fdtd:tetrahedral\\_meshes?rev=1517559759](http://www.gsvit.net/wiki/doku.php/fdtd:tetrahedral_meshes?rev=1517559759)

Last update: **2018/02/02 09:22**