**Generating a candidate wall/limiter shape for use by SPARC**

**To run:**

cd /project/projectdirs/m3195/ascot/mypython (or issue my ‘tomypython’ alias)

python

import triangulate\_torus as tri

tri.construct\_torus(ishape,fn\_stub) 🡨 currently, allowable shapes are 1 thru 19.

You will have to look in the source code to determine what the values of ishape mean. The files [2020\_11\_18\_spd\_003.pptx](file:///C:\Users\sscott\Documents\ripple\ASCOT_handover\2020_11_18_spd_003.pptx) and [spd-analysis-history.docx](file:///C:\Users\sscott\Documents\ripple\ASCOT_handover\spd-analysis-history.docx) describe the ‘family’ of wall/limiter shapes that is currently implemented in triangulate\_torus.py.

The input parameter fn\_stub is a character-string prefix for filenames generated by the triangulate\_torus.py script.

There is also [software](file:///C:\Users\sscott\Documents\ripple\ASCOT_handover\stl_file_generation.docx) to read a fully 3D wall shape provided by the engineers and write it into an ASCOT5 input file (\*.h5).