1 3D-neutronics

1.1 3D-assembly-homo-action

• Input file: 3D-assembly-homo-action.i

• Mesh: 3D-assembly-30deg-reflec.msh

• Transient problem.

• Fuel, Moderator, and coolant are homogenized.

Figure 1 displays the geometry. Figure 2 shows the results.

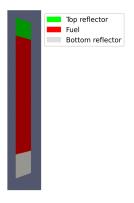


Figure 1: 3D-assembly-30deg-reflec scaled down geometry.

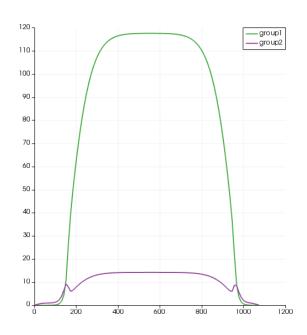


Figure 2: Group 1 and 2 axial flux at 1 msec.

1.2 3D-fullcore-120-homo

• Input file: 3D-fullcore-120-homo.i

- Mesh: 3D-fullcore-120-homo.msh
- Transient problem.

Figure 3 displays the geometry. Figure 4 shows the results.

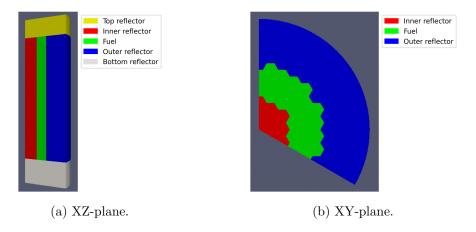
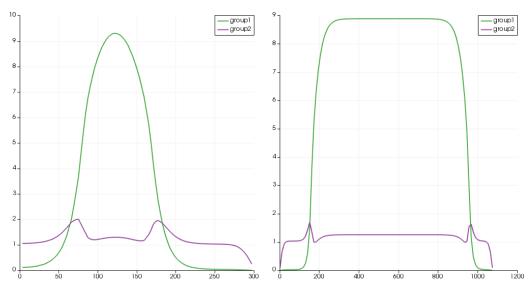


Figure 3: 3D-fullcore-120-homo geometry.



(a) Radial flux between points (0,0,400) and (b) Axial flux between points (120,-60,0) and (300,0,400). (120,-60,1073).

Figure 4: Group 1 and 2 axial fluxes in different locations at 1 msec.