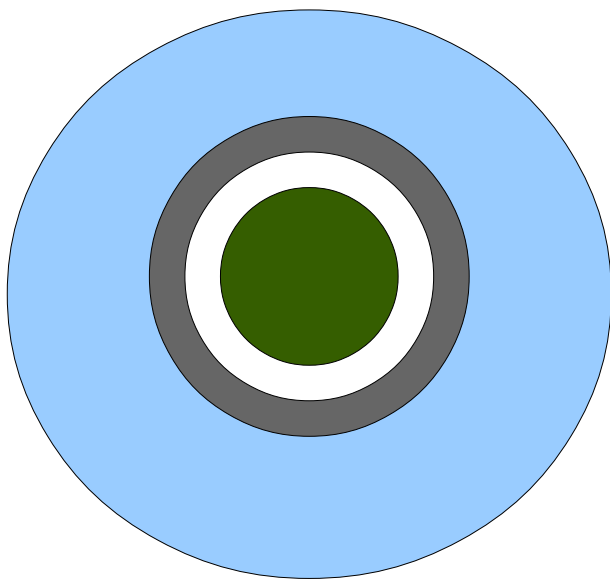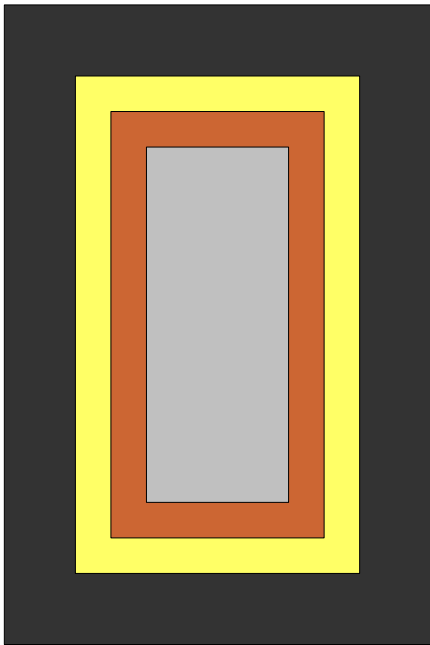# Update on propagation Sims

- Have run 100000 neutrons each from USD and sources spectra for 3 simplified geometries

  - Some debugging to do, and should increase stats to 1000000, also scale to different production numbers for USD vs Sources

  - Just made some quick plots, so not in final versions
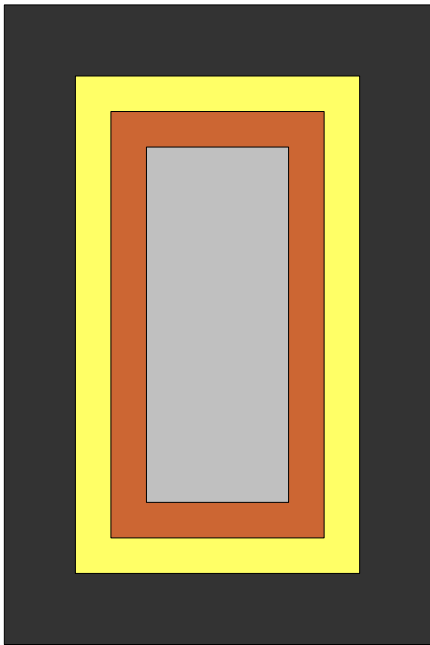
Argon geometry

- Nested spheres (not drawn to scale)
  - 1m radius Argon
  - 50 cm acrylic (up to 1.5 m radius)
  - 5 cm glass for neutron source (too thick) (up to 1.55 m radius)
  - Water out to 3m radius

Germanium Geometry

- Nested Cylinders (not drawn to scale)
  - 5 cm radius, 1.2m tall germanium
  - 1 cm thick copper (source of neutrons)
  - 15 cm polyethylene
  - 15 cm lead

Xenon Geometry

- Nested Cylinders (not drawn to scale)
  - 50 cm radius, 1m tall germanium
  - 3 cm teflon (future source of neutrons)
  - 2 cm titanium (current source of neutrons)
  - 1m scintillator