

# Prototype FHR reactor

- A prototype pebble-bed Fluoride-salt cooled High Temperature Reactor (FHR) is planned to be built in Oak Ridge, TN
- SCALE model developed based on non-proprietary Preliminary Safety Analysis Report ([PSAR](#)) and UC Berkeley FHR Mark 1 design

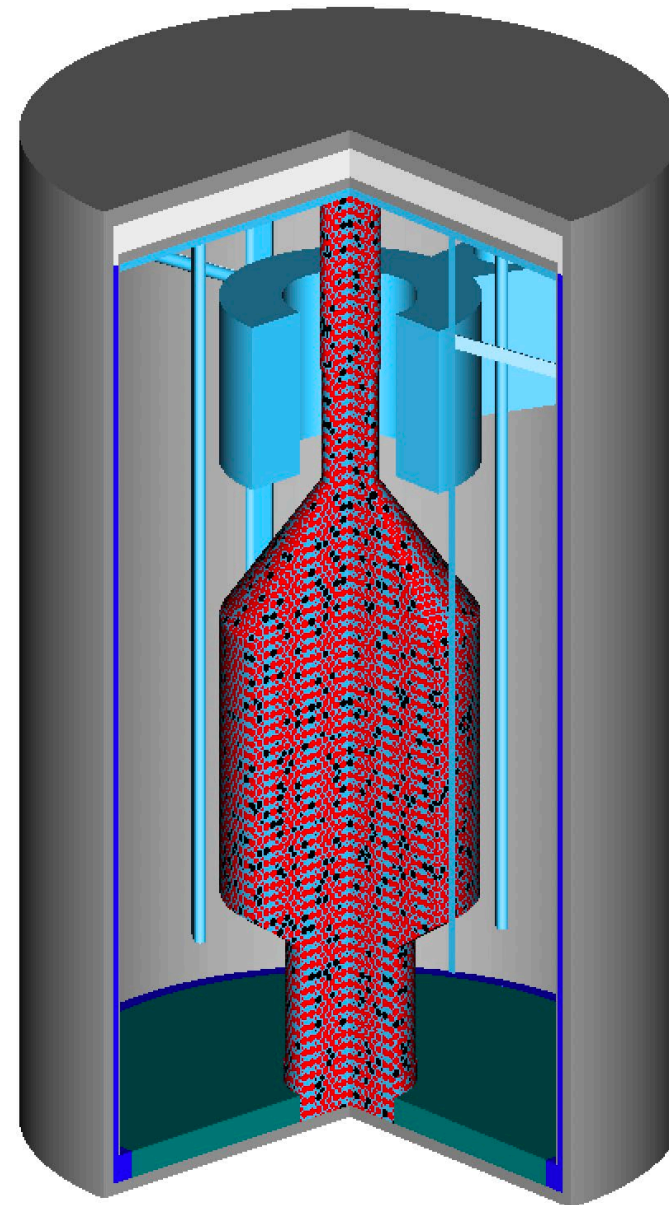
**Blue:** FLiBe Coolant

**Red:** Fuel Pebble

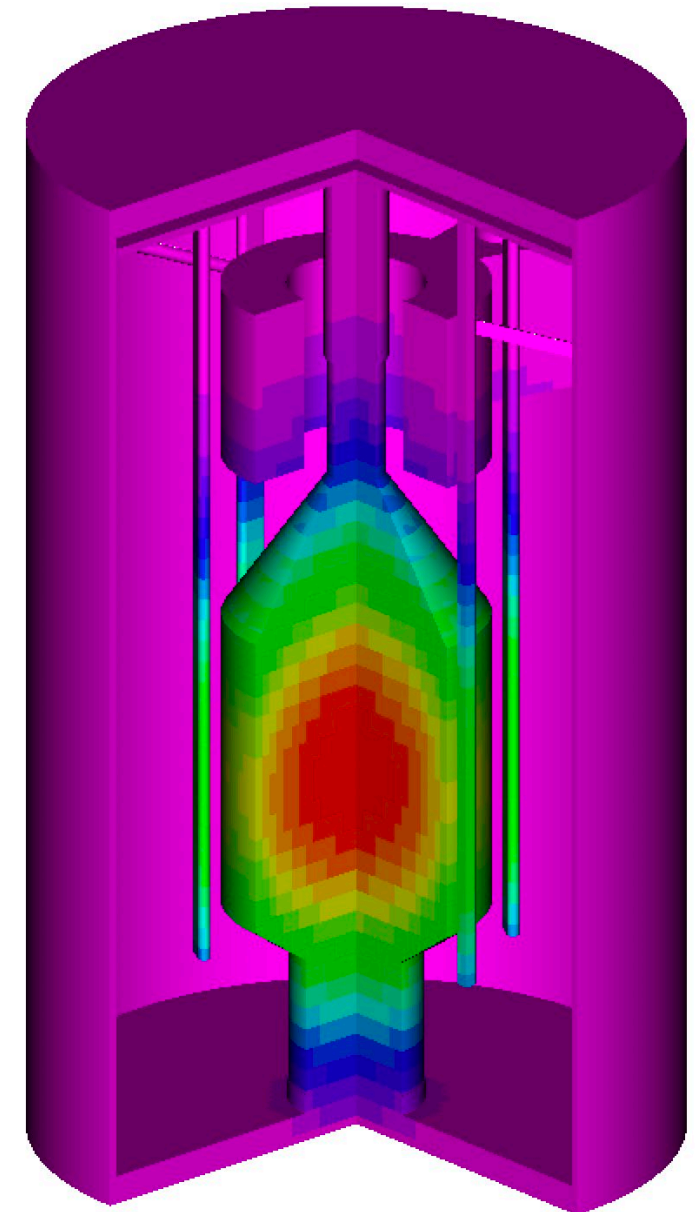
**Black:** Moderator Pebble

**Gray:** Steel Structure

Removed in plot: Graphite Reflector



**3D SCALE model**



**Neutron flux**

Power Level (MWth)	35
Inlet/Outlet Temp. (°C)	550/620
Core Volume (m <sup>3</sup> )	2
Discharge Burnup (%FIMA)	6
Enrichment (% U-235)	19.9