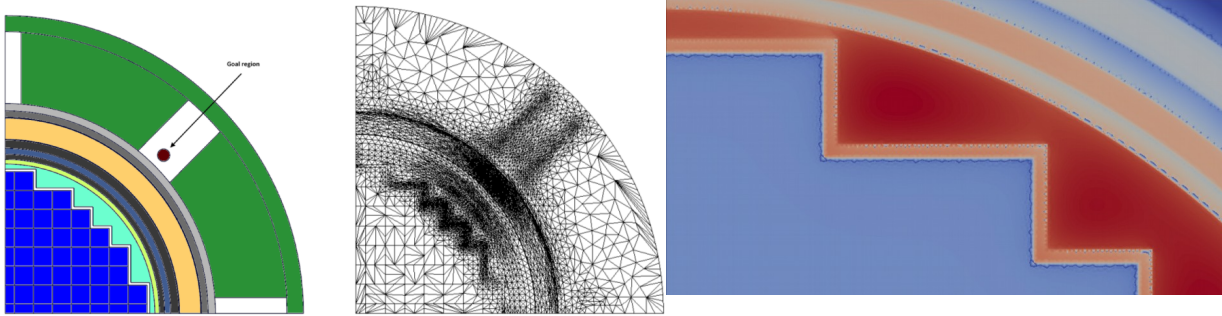
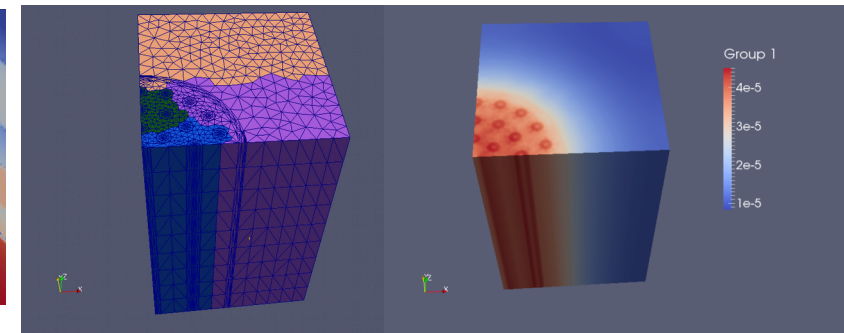


FETCH: Neutron Kinetics Code: Time dependent, steady state and eigenvalue calculations :

Key technologies: Unstructured mesh FEM, Arbitrary Angular approximations (SN,PN WAVELETS, POD), **Self-adaptive resolution in space** & angle, Parallel solvers: scales in the 10K cores **Reduced Order models – space and angle**, Adjoint based Sensitivity & Uncertainty methods

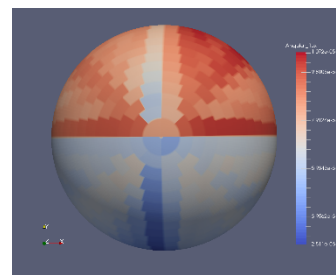
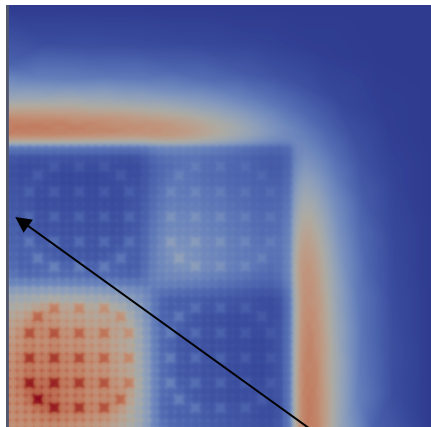


Adaptive Resolution

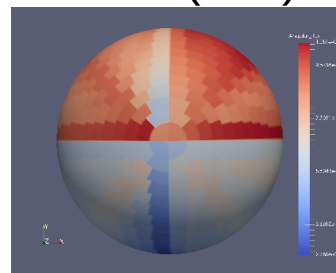


Parallel Solvers

Roms in Angle



ROM (~20)



Sn (~500)

Roms in Space: Real time Transient Simulation

