

Cooling of sphere - Natural and Forced Convection

This case study aims to numerically simulate the behavior of cooling of a heated sphere in both natural and forced convective environment. The flow behavior in the fluid domain and the temperature in the solid sphere is analysed. Conjugate Heat Transfer between conduction in solid sphere and convection in fluid domain is used to simulated the case study. The thermal source for the simulation is provided by the source terms in the energy equation using fvOptions.

Solver used : chtMultiRegionFoam