

Simulation of Water Droplet Impact on Hydrophilic and Hydrophobic surfaces

This case study aims to numerically simulate the behavior of a water droplet falling onto a hydrophobic and hydrophilic surface from an arbitrary height of 5 cm. Volume of Fraction method (VOF) is employed to handle multi-phase interaction between water and air. Adaptive Mesh refinement is being used to get better accurate behavior of water Droplets after impact. The hydrophilic and hydrophobic behavior is governed by the contact angle of the surface.

Solver used : interFoam