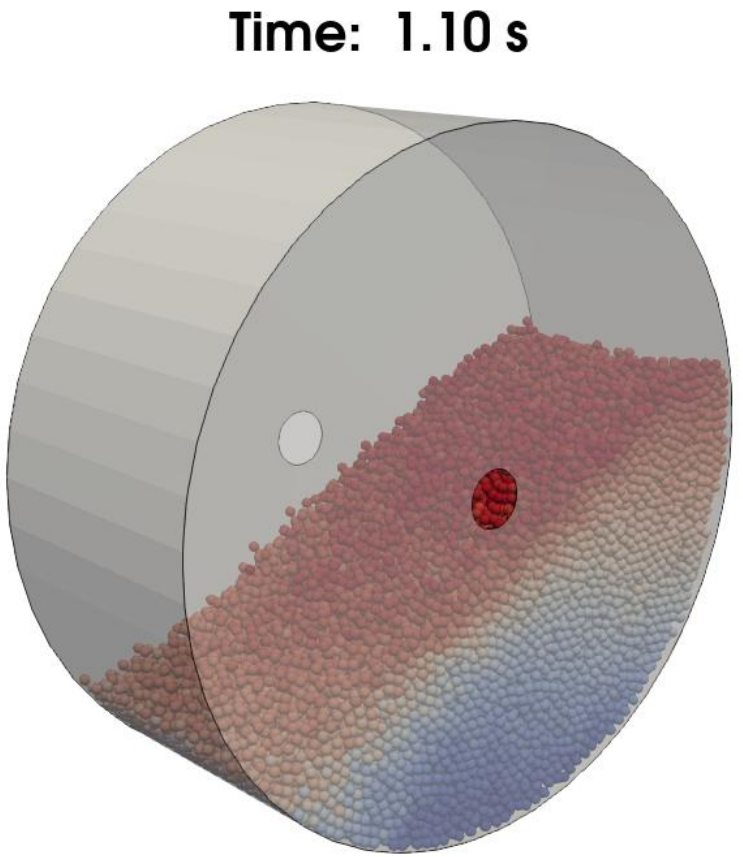
# Simulating a rotating drum

# Problem Definition

- Geometric data
  - Length: 10 cm
  - Diameter: 24 cm
- Particles
  - 4-mm spheres
  - Density: 1000 kg/m3
- Simulation
  - Duration: 10 s
  - dt: $10^{-5}$ s
  - Integration method: Adams-Bashforth $4^{th}$ order



# Steps toward simulation

- Defining particles:
  - Define particles: names, densities, sizes
  - Initial position and velocity
- Defining geometry:
  - Motion model
  - Surfaces and their physical properties
- Performing simulation
  - Simulation settings
  - Simulation domain
  - Solver: sphereGranFlow
- Post-processing
  - pFlowToVtk

# Simulation Domain