Motivation and Goals
• Build a 3D model of a helium-based pulsating heat pipe
• CFD modeling can reduce the amount of experimental work
• Gain a better understanding of working principle of PHP

Geometry and Mesh

Flow Visualization

Conclusions and Future Work
• Animation of the operating of PHP was obtained
• Temperature oscillations of pulsating heat pipes with helium as the working fluid have been successfully simulated
• Bulk circulation with changing direction was observed
• Larger number of turns will be simulated
• The effects of more parameters (fill ratio, length, etc) will be investigated