Synopsis

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Study of Forced Convection over Heated 2D Cylindrical Body

The primary objective of this study is to observe the effect of exposing a 2-D heated cylindrical body to an air flow of 3 different Reyolds numbers (20, 100, 200). To visualise their respective velocity and temperature behaviours using contours and understand the physics behind the nature of air flow and its influence on the convection of a heated cylindrical body. The study is performed entirely in OpenFoam environment from using BlockMesh for creation of geometry and mesh to post-processing results using Para Foam.