AIM Lid-Driven Cavity - Validation

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Validation

One way to verify the AIM solution is to compare it with results from Fluent. Below is the velocity contour of a lid driven cavity done in Fluent in a study called “Three Dimensional Lid Driven Cavity” by Ashok Sivanandham, Boris Makarov and Laith Zori.

By comparing it to the velocity contour created by AIM, we can see that they are similar. There is an area of high velocity at the top of the box where the wall is moving and a medium velocity at the right wall. Also, there is a spread of low velocity that sweeps the bottom left corner and goes up while there is an area of very low velocity in the center.

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