

Figure 10 is a line graph showing the normalized velocity profile (U/U_0) versus the normalized distance (x/L) for the velocity profile at the inlet of the channel. The graph compares experimental data (black dots for upper surface, black stars for lower surface) with numerical simulations using 10, 17, 25, and 45 nodes. The velocity profile is skewed towards the upper wall. The 45-node simulation (red line) shows the best agreement with the experimental data, particularly in the peak velocity region.

