Figure 2: Contours of the conditionally averaged streamwise vorticity at $y^+ = 15$ given the conditions of (a) $p_w^+ = -2.5$ and (b) $p_w^+ = 2.5$.

Figure 11: Instantaneous flow field and deformation of the compliant cylinder in case 2-d.

Figure 6: Instantaneous flow field of plane channel flow. (a) $t^+ = 4.86$, (b) $t^+ = 602.1$. Blue: $u^+ = -3.5$, Red: $u^+ = 3.5$, White: $II^+ = -0.03$.

Figure 14: Instantaneous flow field around a rigid sphere. Isosurface: $II = -0.01$.

Figure 7: Instantaneous flow field over the compliant surface. For caption, see Fig. 6.

Figure 15: Instantaneous flow field around a compliant sphere (Case 1).