

Figure 1: Velocity and displacement amplitude and mean power as a function of  $U^*$ . (a), (c) and (e) are calculated using input  $C_y$  data at Re=22300 obtained by and present data at three different damping ratios:  $\zeta=0.0125$  (\*\*),  $\zeta=0.01$  ( $\mathbf{\nabla}$ ) and  $\zeta=0.015$  ( $\mathbf{\Phi}$ ) at Re=165 from the fixed body simulations and present data from three different damping ratios:  $\zeta=0.075$  (×),  $\zeta=0.015$  ( $\mathbf{\Phi}$ ) and  $\zeta=0.0175$  (+). The multiple branches for the higher Re are due to the hysteresis between two solutions.