# Large-amplitude membrane flutter in inviscid flow
# Movie Caption List

Christiana Mavroyiakoumou and Silas Alben

**Caption for Movie 1:**
Membrane motion (in orange) and vortex wake (in blue) with dimensionless quantities: membrane mass $R_1 = 0.31623$, stretching rigidity $R_3 = 3.1623$, and pretension $T_0 = 0.01$. Here the leading edge of the membrane is fixed at $y(-1, t) = 0$ for all time and the trailing edge is free to deflect vertically, satisfying $\partial_\alpha y(1, t) = 0$. The $x$-axis shows the $x$-coordinate of the membrane and wake position, and the $y$-axis shows the $y$-coordinate. Note that the $x$-coordinate becomes more negative as time progresses because the membrane is being pulled to the left with a constant speed $U$.

**Caption for Movie 2:**
Membrane motion (in orange) and vortex wake (in blue) with $R_1 = 0.31623$, $R_3 = 3.1623$, $T_0 = 0.01$. Here both the leading edge and the trailing edge of the membrane are free to deflect vertically, satisfying $\partial_\alpha y(-1, t) = 0$ and $\partial_\alpha y(1, t) = 0$, respectively. The $x$-axis shows the $x$-coordinate of the membrane and wake position, and the $y$-axis shows the $y$-coordinate.

**Caption for Movie 3:**
Membrane motion (in green) and vortex wake (in blue) with $R_1 = 3.1623$, $R_3 = 10$, $T_0 = 0.01$. Here both the leading edge and the trailing edge of the membrane are free to deflect vertically, satisfying $\partial_\alpha y(-1, t) = 0$ and $\partial_\alpha y(1, t) = 0$, respectively. The $x$-axis shows the $x$-coordinate of the membrane and wake position, and the $y$-axis shows the $y$-coordinate.