**Flying in Reverse: Kinematics and Aerodynamics of a Dragonfly in Backward Free Flight**

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Supplementary Material Figure 2: Pressure Distribution at Maximum Force Production During 3rd Stroke for each Wing Pair. (A, B)–Forewing downstroke (t/T= 0.36) and Forewing upstroke (t/T=0.83) respectively. (C,D) - Hindwing downstroke (t/T=0.32) and Hindwing upstroke (t/T=0.74) respectively. (A(i) B(i) C(i) D(i)) The iso-surface of the -criterion () during the 3rd flapping stroke is coloured by the pressure distribution in the flow field. Low pressure is found where a leading edge vortex (LEV) is present. The pressure is non-dimensionalized as follows: where is the freestream pressure. (A(ii), B(ii), C(ii), D(ii)). The pressure difference () between the top and bottom surface of the wing is displayed on top of a representative dragonfly wing. Region of greatest pressure difference occur where LEV is present.

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