

Table S3: mechanical parameters for **Fig 6** and **Fig 7. Emergence of deterministic chaos in the conservative head dynamics as amplitude of motion is increased.** Values given in larval units (seg = resting segment length, segmass = mass of a single segment boundary, nondim = dimensionless/nondimensional).

| symbol | description | value |
|------------|---|-------------------------------|
| ϵ | amplitude | varies (see figure) (nondim.) |
| λ | ratio of transverse and axial frequencies | $e/6$ (nondim.) |
| E | total mechanical energy | $1/2$ (nondim.) |