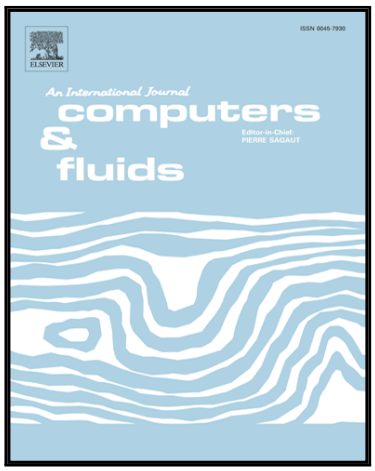


# Enhancement of propulsive performance of flapping foil by fish-like motion pattern

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PII: S0045-7930(17)30255-4
DOI: 10.1016/j.compfluid.2017.07.016
Reference: CAF 3549

To appear in: *Computers and Fluids*

Received date: 23 June 2016
Revised date: 16 July 2017
Accepted date: 19 July 2017

Please cite this article as: H.R. Karbasian , J.A. Esfahani , Enhancement of propulsive performance of flapping foil by fish-like motion pattern, *Computers and Fluids* (2017), doi: 10.1016/j.compfluid.2017.07.016

**Highlights**

- Flow pattern was considered around a moving foil in different motion patterns.
- Complexity of motion pattern increases the complexity of fluid structures in wake region.
- Solved flow shows the initiation, growth and shedding of core vortices are affected by motion of wall (foil).
- Fish-like motion pattern can significantly enhance the propulsive efficiency
- Fish-like motion pattern also brings a complex hydrodynamics loop (force versus angle of attack).