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Could flapping foil propulsion become a commercial shipping reality? BRENDEN EPPS, Dartmouth College — Since the 1990s, fluid dynamicists have made great strides towards understanding the physics of flapping foil propulsion. However, to date, few commercial shipping vessels employ this technology. Why? How does the efficiency of a flapping hydrofoil compare to that of a conventional screw propeller? What technical challenges exist, and how might we overcome them in order to make flapping foil propulsion a reality for commercial shipping vessels?

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 $\begin{array}{c} {\bf Brenden\ Epps} \\ {\bf Dartmouth\ College} \end{array}$

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