Abstract Submitted
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Swimming in a yield stress fluid NEIL BALMFORTH, University of British Columbia, DUNCAN HEWITT, University of Cambridge — We extend G.I. Taylor's classic model of swimming in a viscous fluid using a wavy cylindrical tail by adding a yield stress to the ambient medium. We calculate how the swimming speed is modified for waves of both low and high amplitude. We examine the flow patterns created around the swimmer as it locomotes and comment on designing strategies for optimal progress.

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