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Swimming of Taylor wavy sheets in viscoelastic fluids ALEXAN-DER MOROZOV, School of Physics & Astronomy, University of Edinburgh — We consider a model swimmer, the Taylor wavy sheet, moving in a viscoelastic fluid. Based on the solution obtained by E. Lauga (Phys. Fluids '97), we propose a mechanism for sheet's propulsion in elastic fluids. We present a full numerical calculation of swimming at arbitrary amplitudes, and compute the most efficient and fastest waveforms for undulatory swimming in bulk and next to a boundary.

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