Abstract Submitted
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Low-Reynolds-number swimming in confined geometries DARREN CROWDY, Imperial College London — We present results of a theoretical investigation into the locomotion in confined geometries (e.g. near no-slip walls) of simple circular swimmers, in two dimensions, actuated by some imposed velocity profile in their surface. It is shown how use of the reciprocal theorem of Stokes flows together with knowledge of exact solutions for certain "dragging problems" can lead to the derivation of explicit dynamical systems for the swimmer's linear and angular velocities.

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