

Abstract Submitted  
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**Levitation by thin viscous layers.**<sup>1</sup> TOM MULLIN, HILARY OCKENDON, JOHN OCKENDON, University of Oxford — We consider the levitation of cuboidal blocks by means of the viscous stresses that are generated when the block adheres to a vertically moving wall that is coated with oil. We then describe an experimental procedure that reveals the parameter regimes in which long-time levitation can occur. Then a simple model for the relevant lubrication flows is used to explain the theoretical basis for these observations.

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