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Walking droplets interacting with planar boundaries GIUSEPPE PUCCI, PEDRO SENZ, ADAM DAMIANO, DANIEL HARRIS, PIERRE-THOMAS BRUN, JOHN BUSH, Department of Mathematics, Massachusetts Institute of Technology — A decade ago, Yves Couder and co-workers discovered that droplets may self-propel along the surface of a vibrating fluid bath. We here present the results of an experimental investigation of the interaction of such walking droplets with boundaries. Particular attention will be given to characterizing reflection from plane boundaries and diffraction through an aperture.

> Giuseppe Pucci Department of Mathematics, Massachusetts Institute of Technology

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