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Rotating fluid bells NIKOS SAVVA, JOHN W.M. BUSH, Department of Mathematics, MIT — We present the results of a combined experimental and theoretical investigation of rotating fluid sheets. When a fluid jet issues downwards from a circular nozzle rotating at sufficient speed, the fluid is deflected into bell-shaped forms whose shapes are prescribed by the balance of inertial, gravitational and curvature forces. We examine the dependence of the flow structure on the governing parameters, and present the results of supporting theoretical developments.

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