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Experimental study of spinning granular jets ABRAHAM MED-INA, ESIME-A, IPN, PATRICK WEIDMAN, University of Colorado, ROCIO CHICHARRO, FC-UNAM — In this work the nature of noncohesive granular material flowing out of a rotating vertical pipe under the influence of gravity to form a free granular jet is examined. We analyze systems with different angular velocities Ω and found that the jet radius increases with both Ω and the downward coordinate z. Experiments show that a no-flow condition is achieved for a critical angular velocity, Ω_c . Analytical solutions for the shape of the jet and Ω_c are in good agreement with experiments.

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