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Granular segregation in spinning pipes and circular Hele-Shaw cells MAXIMO PLIEGO, Universidad Politecnica de Queretaro, ABRAHAM MED-INA, ESIME AZCAPOTZALCO, IPN, FRANCISCO HIGUERA, E. T. S. Ingenieros Aeronauticos, UPM — Spinning vertical pipes and spinning horizontal Hele-Shaw cells, both filled with dry, polydisperse, non cohesive granular matter, yield complex flows whose expanding shapes depend on the reached angular velocity  $\Omega$ , the grain sizes and the inner radii of the pipes and the circular cells, respectively. In this work, we present a simple theoretical treatment and a series of experiments related to how the grain's trajectories for grains of several sizes produce segregation

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