

Abstract Submitted  
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**Forces on intruders in granular media**

IBAR DELACRUZ, STEPHAN KOEHLER, WPI — We measure the forces acting on intruders moving in different directions in a granular medium consisting of mono-disperse spherical glass beads. We present the dependence of the drag force on the intruder's geometry and surface roughness, bead size, dragging speed and immersion depth. We also determine the distribution of the forces on the intruder's surfaces. We compare our results with lithostatic pressure ( $p = \rho gz$ ).

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