

Abstract Submitted
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The stress dip under a granular semi-pile.¹ TOM MULLIN, University of Manchester, IKER ZURIGUEL, University of Navarra — The origin of stress dip under the apex of a sandpile has stimulated significant debate within the scientific community. On the other hand, it is argued that a semi-pile built against a vertical wall is of more practical interest since it serves as a model of dams, dykes and embankments. Numerical results suggest that there will not be a dip in this case. Here we show clear experimental evidence that the presence of the wall enhances the dip under the pile significantly. Moreover, our investigation provides insight into the influence of the wall on the force chains which appear to a key element in the formation of the dip.

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Tom Mullin
University of Manchester

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