

Abstract Submitted  
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**Particles impacting on a granular bed** JOHN HINCH, DAMTP, University of Cambridge — An asymptotic analysis is made to find the penetration depth and the stopping time for a particle impacting a granular bed. Newton's equation is solved with a drag force with two terms, one term proportional to the square of the velocity and one term linear in the depth. The penetration depth is found to increase with the logarithm of the impact velocity, while the stopping time is found to decrease with the inverse of the square root of the logarithm of the impact velocity.

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