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Sliding Downhill Horizontally ULRICH ZURCHER, APS — We study the motion of object sliding on a rough incline plane. The coefficient of kinetic friction between the surface and the object is such that the magnitude of the gravitational force along the incline F is equal to the magnitude of the kinetic friction S. If the initial velocity of the object is along the incline, the object slides down the incline with constant velocity. We study the case when the object in launched in horizontal direction. We derive exact expressions for the terminal speed of the object and the maximum horizontal displacement of the object.

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