Analytic dependence of the critical drift velocity for high-speed tracked vehicle from its oscillations

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In the modern theory of movement the border of a controlled curvilinear movement of a track-laying vehicle is defined without its fluctuations. The article presents the formula for a speed with critical controllability with respect to vehicle fluctuations. The valid border of a controlled movement with the fluctuations is much below and depends on the track profile parameters, the movement speed and the suspension system performance.

Keywords: track-laying vehicle, controlled curvilinear movement.

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