# INVESTIGATING RIDE QUALITY OF A WHEELED VEHICLE DURING LINEAR MOTION OVER TRACK IRREGULARITIES

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| Abstract | Keywords |
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| *Solving the problem of vibration loading at the driver's workstation involves describing mathematical models of wheeled vehicle motion that could aid in analysing the effect the structural parameters of machines have on their traction performance and general performance characteristics during linear and curvilinear motion on a hard road surface and on deformable ground. We employed the Matlab Simulink software environment to develop a mathematical model of linear motion for a wheeled vehicle, using a tri-axle car with a rocker arm axle suspension as an example. Simulation techniques validate our mathematical model. We present results of modelling car motion at various speeds on roads with quality indexes from 1 to 5.* | |
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