# DYNAMICS OF A BUSH-SHAFT SYSTEM WITH IMPACT AND FRICTION

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In this work dynamics of a rigid body (bush) with viscous-elastic constraints and subject to impact and friction actions is studied. The body is in dynamical contact with another moving body (rotated with constant velocity thermo-elastic shaft), and friction generated heat and wear (on the contact surface) are taken into account. The problem is solved analytically and the obtained prediction is verified numerically showing surprisingly good agreement.