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1. *Kuleshov A.S.* Mathematical Model of the Skateboard // Proc. XXIV Int. Symp. on Biomechanics in Sports. – 2006. – **2**. – P. 715–719.
2. *Kuleshov A.S.* Mathematical Model of a Skateboard with One Degree of Freedom // Dokl. Physics. – 2007. – **52**. – P. 283–286.
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Evolution of rotation of a satellite with cavity filled with a viscous fluid relative to the centre of mass of the light pressure torque

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We investigate the fast rotational motion of the dynamically asymmetric satellite relative to the centre of mass with cavity filled with a viscous fluid at low Reynolds member under the action of light pressure torque. Orbital motions with arbitrary eccentricity are assumed to be defined. The system obtained after averaging with respect to Euler–Poinsot motion is analyzed in the case of fast rotations. Kinetic moment of the body with solidificate fluid remains constant. Numerical analysis shows that the kinetic energy is monotonically decreasing. Orientation of vector of the kinetic moment in orbital coordinate system is determined.

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Boundary stabilization of the wave equation by means of a generalized multiplier method

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We here are concerned by the problem of boundary stabilization of the wave equation