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# Desaturation method for accumulated actuator momentum of the spacecraft on high-elliptic orbit without fuel consumption

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*The problem of desaturation of accumulated actuator momentum of the spacecraft on high-elliptic orbit without fuel consumption is considered. Analytical solution of gravity desaturation of actuator momentum in roll and yaw channels is obtained. Also advantages of this method are shown.*

**Keywords:** inertial actuator, spacecraft, gravity gradient forces, MIMO-system, stratify, exact pole placement method.

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