

Golovach, Grigorij P.; Kalajda, Oleksij F.

Analytical and numerical methods of integration of the system of equations of inertial navigation. (Ukrainian. English summary) [Zbl 1195.70033](#)

Visn., Ser. Fiz.-Mat. Nauky, Kyïv. Univ. Im. Tarasa Shevchenka 2008, No. 3, 65-68 (2008).

Summary: The system of differential equations of inertial navigation is considered. For its nonlinear part an approximate solution is constructed in quadrature by the Lapunov-Poincaré method. For the whole system, two numerical extrapolation methods of the third order are proposed.

MSC:

[70M20](#) Orbital mechanics

[65L07](#) Numerical investigation of stability of solutions

Keywords:

[inertial navigation](#); [parameter](#); [quadrature](#)