

Название: Effect of self-seismic oscillations of the foundation on the readout of a ballistic gravimeter with an induction-dynamic catapult

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Краткий обзор (реферат): A mathematical model is developed for the vertical oscillations produced in the base–foundation system of a laser ballistic gravimeter with an induction-dynamic catapult and a symmetric configuration for measuring the acceleration of gravity. Analytic expressions are obtained for the force pulse acting on the foundation during acceleration of the test body that describe the oscillations in the mechanical system of the ballistic laser gravimeter. The effects of the measurement duration and the damping coefficient of the foundation on the results of measurements of the acceleration of gravity are studied.

Ссылка на статью (доступны первая и вторая страницы статьи для просмотра)
<http://link.springer.com/article/10.1007/s11018-015-0675-5>