

Interactive Presentations (IP)
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RESEARCH ON NEW DEFENSE STRATEGIES OF NEAR-EARTH ASTEROIDS

Abstract

The development of observing near-Earth objects and the defense strategies of a variety of near-Earth asteroids are investigated. By comparing and analyzing the realization principle, key technology and existing problems of the defense strategies, the applicability, feasibility and effectiveness of the various strategies are evaluated. Furthermore, with the analysis and summary of these strategies, combining with the development status of near-Earth asteroid defense plans, a new strategy is put forward, which combines a variety of strategies—the kinetic impactor is used on one side of the asteroid and the gravity tractor is used on the other side—to take the relevant effective tactics coping with the potential threat of the asteroids, that can more effectively deflect the asteroid toward one direction and effectively mitigate near-Earth asteroid impact threats in a shorter warning time.