

## THE SOLAR SYSTEM BODIES: FROM OPTICS TO GEOLOGY (2008)

### A NASA STUDY MADE IN 2007 ABOUT NEAR EARTH OBJECT (NEO) MITIGATION OPTIONS.

C. Maccone<sup>1</sup>, Member of the International Academy of Astronautics, Via Martorelli 43, 10155 Torino (Turin), Italy, e-mail: [clmaccon@libero.it](mailto:clmaccon@libero.it)

**Abstract.** In January 2007 this author served as P. I. for the Kinetic Deflection of NEOs during a NASA Study conducted at NASA Marshall Space Flight Center (MSFC) in Huntsville, Alabama, USA.

The Final Presentation of this NASA Study was made by the Team Leader, Robert B. Adams, at the Planetary Defense Conference held in Washington D. C., March 5-8, 2007, and that Conference was attended by this author as well.

The importance of future NASA plans for the deflections of NEOs such as 99942 Aphophis (used as the test-case in this NASA Study) is such that this author thought it convenient to present anew Rob Adam's 2007 Presentation just the same here in Kharkiv, the Ukraine, May 26-29, 2008.

The current presentation is made with the full permission granted to this author by the relevant NASA authorities, and it is an absolutely public-domain material that can be freely downloaded from the web site:

<http://www.aero.org/conferences/planetarydefense/2007papers/S3-8--Adams-Brief.pdf>

It is hoped that the current presentation will be of help to European, Russian and Ukrainian scientists interested to study the Deflection of Hazardous NEOs.

In particular, this NASA Study was conducted under two assumptions:

- 1) The spacecrafts perform the deflection when the NEO is very far away from the Earth and
- 2) A lead time of at least five years is given.