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Key International and Policy Developments

Update on ESA's activities in Planetary Defence

Richard Moissl⁽¹⁾, Juan-Luis Cano⁽¹⁾, Luca Conversi⁽¹⁾, Ian Carnelli⁽²⁾, Michael Khan⁽³⁾, Detlef Koschny⁽⁴⁾ and Roger Walker⁽²⁾

⁽¹⁾ *ESA/ESRIN, Largo Galileo Galilei, 00044 Frascati RM, Italy, +39 337 141 3570, richard.moissl@esa.int*

⁽²⁾ *ESA/ESTEC, Keplerlaan 1, NL-2201 AZ Noordwijk ZH
The Netherlands*

⁽³⁾ *ESA/ESOC, Robert-Bosch-Str. 5
D-64293 Darmstadt, Germany*

⁽⁴⁾ *Chair of Astronautics, TUM, Garching, Germany;*

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ABSTRACT

ESA's Planetary Defence Office, in collaboration with many international partners, is tasked with a constant observation of the sky for near-Earth objects (NEO), which either cross or approach the vicinity of Earth's orbit. For each known Object, a record is kept on all detections and all trajectory evolutions are routinely evaluated for potential impact hazards.

The mission of the ESA Planetary Defence Office:

- Detecting Near Earth Objects, determining their dynamical and physical properties
- Assessment and prediction of impact risks, warning decision makers and disaster relief forces in case of threats
- Risk mitigation through potential reconnaissance and/or deflection missions in the framework of IAWN and SMPAG

In this presentation we will report on the current status of our program and our current activities and provide information about our planned upcoming and future projects, such as mission studies for a reconnaissance mission to asteroid 99942/Apophis during its very close encounter with Earth on Friday 13th April 2029 and the planned enhancement of our work related the Observation, Assessment and Mitigation of NEOs and their impact threats in close collaborations with our international partners

Comments:

(Oral presentation preferred)