

ÖAW

AUSTRIAN  
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SUNDAY, APRIL 2, 2023

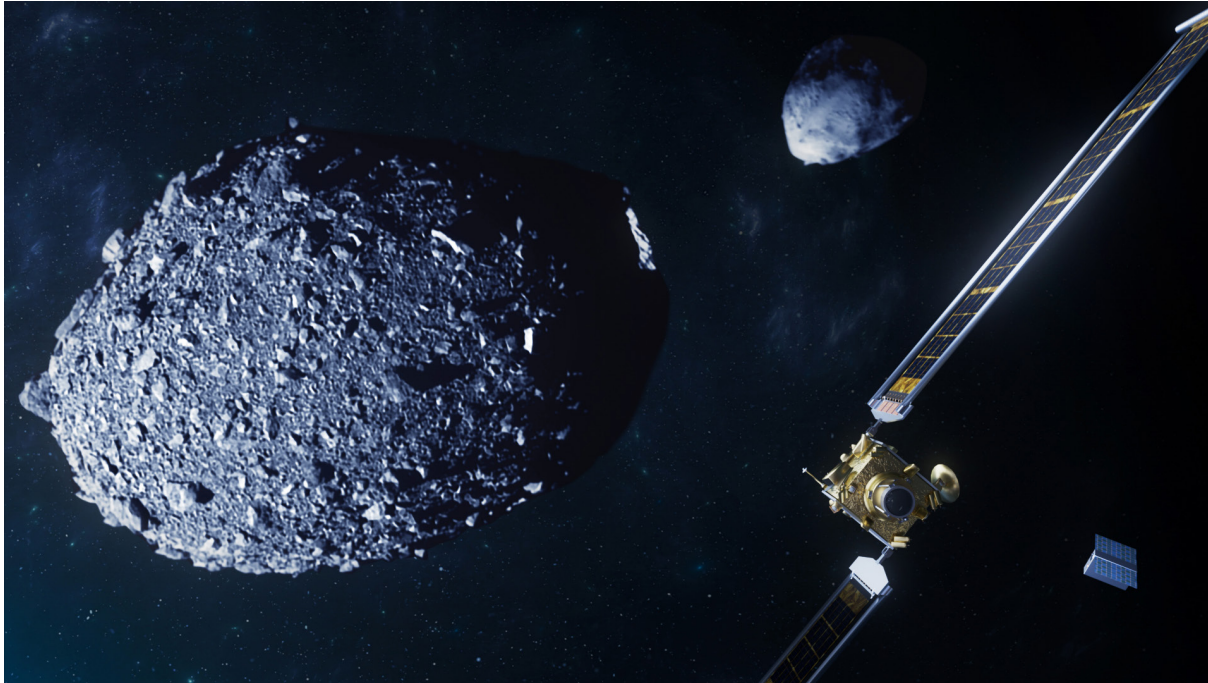
4:30 PM – 8:00 PM

FESTSAAL

AUSTRIAN ACADEMY OF SCIENCES

DR. IGNAZ SEIPEL-PLATZ 2

1010 VIENNA



ÖFFENTLICHE VERANSTALTUNG ANLÄSSLICH DER PLANETARY DEFENSE CONFERENCE IN WIEN

# ACHTUNG IMPACT: PLANETARE VERTEIDIGUNG UND DIE DART-MISSION

# PROGRAM



**4:30–4:45 WELCOME**

**Christian Köberl** | Chair, Commission for Geosciences and  
Deputy Chair, Commission for Astronomy, OeAW & University of Vienna

*Moderation: Christian Köberl | Austrian Academy of Sciences*

**4:45–7:15 LECTURES AND DISCUSSION**

**Christian Köberl** | Chair, Commission for Geosciences and  
Deputy Chair, Commission for Astronomy, OeAW & University of Vienna  
*Impacts on Earth and in the Solar System*

**Lindley Johnson** | National Aeronautics and Space Administration (NASA), USA  
*Planetary Defense at NASA: Defending planet Earth one rock at a time*

**Elena Adams** | Johns Hopkins Applied Physics Lab, USA  
*Double Asteroid Redirection Test (DART): What does it take to impact an asteroid?*

**Nancy Chabot** | Johns Hopkins Applied Physics Lab, USA  
*DART Post-Impact: What have we learned about deflecting asteroids?*

**Michael Kueppers** | European Space Agency (ESA), Germany  
*Die ESA Mission Hera: Wie sehen Didymos und Dimorphos nach dem Einschlag von DART aus?*

**7:15–8:00 RECEPTION**

What can we do against existential asteroid threats to Earth? One answer is to deflect the asteroid, altering its path to miss Earth entirely.

The DART mission is NASA's first space test of this approach, impacting an asteroid to adjust its speed and path. The spacecraft launched on a SpaceX Falcon 9 rocket out of Vandenberg Space Force Base in California in November of 2021, and successfully impacted its target, an asteroid called Dimorphos, on September of 2022. The impact altered the orbit of Dimorphos by 32 minutes and displaced over one million kilograms of rock into space.

DART also carried a small CubeSat from the Italian Space Agency, LICIACube, which flew by the asteroid three minutes after the impact and observed the resulting ejecta.

Currently, scientists around the world are using ground and space-based telescopes to look at the evolving dusty tail of Dimorphos, and are working to understand what does DART's success mean for the future of the planetary defense. The DART mission is managed by the Johns Hopkins Applied Physics Laboratory for NASA.

This public event at the Austrian Academy of Sciences is organized in conjunction with the 8th International Planetary Defense Conference, which is held in Vienna from April 3 to 7, 2023.

## **ORGANIZATION**

Commission for Geosciences (GEOK)

Austrian Academy of Sciences (OeAW)

## **CONTACT**

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## **REGISTRATION**

Online Registration

<https://www.oeaw.ac.at/geok/detail/event/pdc-dart>

Cover image: Illustration of NASA's DART spacecraft and the Italian Space Agency's (ASI) LICIACube, with images of the asteroids Dimorphos and Didymos obtained by the DART spacecraft.

Credit: NASA/Johns Hopkins APL/Joshua Diaz

Please note that video recordings and/or photographs may be taken throughout the event. These will be used by the organizing institution in publications, on-line and in social media. Please contact the event organizer if you have any concerns or if you wish to be exempted from this activity.