

NASA aims for close encounter with comet

NASA's *Deep Impact* spacecraft, now on an extended mission known as *EPOXI*, will rendezvous with comet *Hartley 2* on November 4, flying within 700km and taking close-up images of the comet's icy nucleus

EPOXI*

Utilizes same spacecraft that visited comet *Tempel 1* in July 2005

Science instruments for high and medium resolution imaging, infrared spectroscopy and optical navigation

Solar array

High-gain antenna

Orbit of comet Hartley 2

Encounter Nov 4

Earth at encounter

Earth orbit

Sun

EPOXI orbit

Earth gravity assist Jun 27, 2010

Comet Hartley 2

Official name: **103P/Hartley**

Discovered: **March 1986**

Diameter: **1.5km** (approx)

Time taken to orbit sun: **6.46 years**

Closest approach to Earth: **18 million km**

Lifespan: **700 years**

*Combines names of two mission components – **EPO**ch (Extrasolar Planet Observation and Characterization), **DIXI** (Deep Impact Extended Investigation)