big asteroid flyby presented by science

at NASA here we go again another asteroid is paying a visit to the earth-moon system asteroids have been a hot topic since february 15 2013 when one small asteroid exploded over Russia and another bigger one 2012 da14 made a record-setting close approach to earth on the same day this time the visitor is 1998 qe2 a potentially hazardous asteroid 2.7 kilometers in diameter astronomers are preparing to study the space rock as it harmlessly passes by on May 31st this is a big asteroid that's
going to be one of the best radar imaging targets of the year says Lance Benner of NASA's Jet Propulsion Laboratory as my old friend radar astronomer Steve Austro used to say. spaceship earth is making a flyby of the asteroid so we're going to exploit the capabilities of the radars to understand as much as possible at closest approach on May 31st the asteroid will be 5.8 million kilometers from Earth about 15 times farther than the moon at that range both the Goldstone and Arecibo radars should be able to make detailed
images of 1998 qe2 as Benner the radar

maps should rival the images of other asteroids obtained by spacecraft during flyby missions one thing that intrigues Benner is the asteroids dark complexion according to measurements by the Spitzer Space Telescope 1998 qe2 reflects only six percent of the sunlight that falls on it which makes it blacker than coal consequently it could have a composition similar to that of 101 955 venue the target of NASA's osiris-rex mission he says following launch in 2016 the osiris-rex spacecraft will travel to
near-earth asteroid Bennu study it from

orbit and ultimately bring back a sample

for laboratory study on earth near-earth

asteroid Bennu interests researchers for

two reasons first it is a carbon-rich

asteroid that could Harbor amino acids

and other organic molecules essential to

primitive life second it's the kind of

asteroid that NASA ultimately might want

to nudge indeed the osiris-rex mission

is considered to be a vital part of

NASA's plans to find study capture and

relocate an asteroid for exploration by

astronauts perhaps 1998 qe2 will give

researchers a sneak preview of this
fascinating space rock although the closest approach is on May 31st the best time to observe 1998qe2 will be during the first week of June when the asteroid enters northern skies at that time the asteroid will turn its sunlit side toward Earth making it an easy target for large backyard telescopes at maximum brightness on June third and fourth it is expected to be as bright as an 11th magnitude star while amateur astronomers watch the space rock glide through the constellations Libra and Ophiuchus NASA radars will be pinging the space rock
with powerful bursts of radio energy revealing an alien landscape that no one has ever seen before for more big stories around the earth-moon system

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