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By:

## [Comet to suffer Deep Impact from US probe](#)

### *For scientific purposes*

Remember the blockbusters "Armageddon" and "Deep Impact"? Well, it seems that so do the scientists, since they'll be attempting something quite similar. A NASA spacecraft steered from the Pasadena-based Jet Propulsion Laboratory (JPL) will attempt to blow up a comet next month, thus answering basic questions about the formation of the solar system by offering a better look at the nature and composition of these frozen celestial traveling bodies. The probe, code named Deep Impact (told you they've seen the movie), is scheduled to make a close encounter with comet Tempel 1 on July 3, when it will separate into two parts: a craft the size of a SUV that will fly by the comet, acting as an amplifier for the information sent by its photographer sidekick, the size of a washing machine. While the flyby craft watches, the kamikaze impactor will navigate itself into the path of the oncoming comet. The idea is to reveal the interior of the comet, which is thought to contain material that has not changed since the solar system was formed, and the information will be gathered by the four data collectors the Deep Impact spacecraft is fitted with. The comet's orbit should not be significantly changed following the impact. Tempel 1, discovered in 1867, orbits the sun between Mars and Jupiter every 5.5 years, and has a nucleus the size of the District of Columbia. Rick Grammier, Deep Impact project manager at the Jet Propulsion Laboratory, said that the mission is like "a bullet trying to hit a second bullet with a third bullet.", and then added "We are really threading the needle with this one. In our quest of a great scientific payoff, we are attempting something never done before at speeds and distances that are truly out of this world." Anyhow, this experiment has another important goal, shedding light on Earth's encounters, past and future, with comets. "Without a doubt our planet will be hit again many times in the future, unless we can prevent it from happening," said astronomer Ken Wilson of the Science Museum of Virginia. "We're not sure yet what the best way to do this is, but in order to figure that out, we've really got to better understand what comets and asteroids are made of and how they're put together. So, in a sense, Deep Impact is our latest attempt to get to know our potential enemies."