

Gravity assist for interstellar travel

The gravity assist is a method used to gain speed or alter the path of a rocket or satellite using the gravity of a planet or other object. This method was used when the Juno spacecraft used the Earth's gravity to begin its approach to Jupiter. Our project is based upon the idea of using the method multiple times to increase the speed of a satellite dramatically and potentially be used for interstellar travel. We will begin by modelling the solar system and creating a function to calculate possible slingshots to maximize velocity. Another factor would be avoiding space debris such as asteroids.