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## CANADIAN CONTRIBUTIONS ON THE OSIRIS-REX MISSION TO NEAR EARTH ASTEROID 1999 RQ36

## Abstract

NASA will launch a spacecraft to near Earth asteroid 1999 RQ36 in 2016 and use a sampling mechanism to sample the asteroid. This sample from a primitive body will help understanding our solar system's formation. The mission, called Origins-Spectral Interpretation-Resource Identification-Security-Regolith Explorer, or OSIRIS-REx, will be the first U.S. mission to return samples from an asteroid to Earth. The Canadian contribution to the mission includes the support of a Canadian science team that will participate in the analysis of the returned sample and the OSIRIS-REx Laser Altimeter (or OLA); an advanced scanning lidar that will provide global topographic mapping of the asteroid surface, assists the mission as a navigation aid, and provides scale for images and spectra.