

Engineering Aspect of Small Body Exploration -Hayabusa2 and Future

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The second asteroid sample return mission "Hayabusa-2" is now under development. It is to be launched in the end of 2014 to set out on a round-trip voyage for a C-type asteroid 1999 JU3. The Hayabusa2 mission is regarded as a series of the Japanese programmatic exploration of small body. In order to stably and strongly evolve our small body explorations, the best blend of new technologies and heritage-based technology should always be pursued. This talk reviews the mission scenario of Hayabusa2; what are mission enablers and what are technological challenges in it, and then discusses several future strawman missions that can be realized with our present and near-future engineering capabilities.

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