Tasmanian scientists part of Japanese rocket launch

In what is being billed as the highest performing lunar probe since the Apollo program, the Japanese SELENE lunar mission will launch at 11.31am (EST) on Friday (September 14) and conduct experiments with the assistance of University of Tasmania scientists.

The Japan Aerospace Exploration Agency will launch an H-IIA rocket carrying the SELENE lunar mission. It will try to get closer to the core of the mystery of origin and evolution of the Moon.

The University’s 26m Mt Pleasant radio telescope will play an important role in one of the mission experiments.

The experiment is called VRAD and will use an array of radio telescopes on the Earth to accurately track the position of the spacecraft and use this information to make the most accurate measurements of the lunar gravitational field.

Dr Simon Ellingsen, from the School of Mathematics and Physics, is co-investigator of VRAD.

“The spacecraft will carry eight different instruments onboard to undertake a variety of scientific experiments.

“It will also carry two miniature satellites that will be deployed into lunar orbit. We will use the observations of both the miniature satellites and the main spacecraft to determine the lunar gravitational field.”

The mission will run for 12 months.

For interviews:
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Background:
The Moon's gravitational field is of interest to scientists because it can be used to test different theories as to how the planets in our solar system formed. One idea is that the Moon was originally part of the Earth and that during the formation of the solar system the proto-Earth had a collision with another large (Mars-sized) object. This nearly split the proto-Earth in two, and one of the large pieces thrown off in the collision became the Moon.
There are more details of the launch (including a press kit) at the web site
http://www.jaxa.jp/countdown/f13/index_e.html

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