

## Taiwan to host ground control for int'l space station experiment

2011/08/10 18:42:42

Taipei, Aug. 10 (CNA) Taiwan will host the world's second, and Asia's first, ground control center of a cosmos research project called Alpha Magnetic Spectrometer (AMS-02) by June 2012, Academia Sinica said Wednesday.

The AMS-02 project, launched by the U.S. Department of Energy in 1999 in cooperation with 15 other countries, is designed mainly to detect charged particles in cosmic rays to find anti-matter, dark matter and missing matter in the hope of answering the questions about the "big bang" and the formation of the universe.

The module is attached to the International Space Station, but can be controlled from the ground.

The first AMS project (AMS-01) started in 1994 using equipment deployed on the payload of the U.S. space shuttle Discovery, which orbited the earth for 10 days in the initial research mission in 1998. The AMS-02 project began in 1999, but the module was not delivered until this past May aboard the final flight of space shuttle Endeavour.

"Everything is still under preparations, but our goal is to set up the Payload Operations and Control Center (POCC) in Taiwan by June next year or earlier," said Lee Shih-chang, a fellow at Academia Sinica and Taiwan's coordinator of the AMS project.

"The plan is still in the beginning," he said, adding that after the U.S. agency NASA approved the proposal earlier, a lot of red tape and all level discussions about manpower, funds and location "remain to be settled."

According to the scholar, the military-run Chungshan Institute of Science and Technology, National Central University and Academia Sinica are all bidding to host such a control center.

Despite all the uncertainty, Lee is still optimistic about the establishment of the control center in Taiwan, which will copy the design of the other ground control facility in Europe, but tailored to local conditions.

When the ground control in Taiwan is established, the researchers in Europe will no longer have to take night shifts for the time difference, he said.

The ambitious AMS projects are hosted by Chinese-American Nobel laureate in physics Samuel Chao Chung Ting, who is also a member of Taiwan's top research institute Academia Sinica.

The system has won praise from international astronomic researchers and will demonstrate Taiwan's capability in the R&D and manufacturing of electronic systems for studying the cosmos. (By James Lee)

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