
Antimatter detector AMS-02 operating smoothly: project scientist

BEIJING, June 2 (Xinhua) -- A senior Chinese scientist with the Alpha Magnetic Spectrometer (AMS) project said that all parts of the AMS-02, a particle detector used to detect antimatter and dark matter, have been operating smoothly since the detector was launched into space in May.

"Judging from the data we have received so far, all components and units of the particle detector have been working normally," Professor He-Sheng Chen, one of the AMS project's team leaders, said on Wednesday .

Chen is also the head of the Institute of High Energy Physics (IHEP) of the Chinese Academy of Sciences (CAS). As a participant in the project, the IHEP has access to data sent from the AMS-02.

Samuel Ting, a Chinese-born American scientist and Nobel laureate who headed a 600-member multinational team that developed the AMS project, noted that the greatest challenge will be to analyze data collected by the detector.

Ting said that all findings from the project will be publicized after undergoing "strict" verification.

According to IHEP researcher Chen Guoming, the AMS-02 will perform precise measurements of the composition of cosmic rays and measure the charges of particles contained therein, thereby allowing scientists to distinguish antimatter from regular matter.

The AMS-02 embarked on a ten-year-long quest to discover antimatter and dark matter on May 16, when it was launched from the United States.

Scientists theoretically believe that matter and antimatter were created in equal amounts during the Big Bang. The disappearance of antimatter remains a mystery to the scientific community.

According to Professor He-Sheng Chen, the IHEP plans to win more support from the CAS and the National Natural Science Foundation of China in order to strengthen its AMS-02 data analysis team.