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‘INCREDIBLE INSTRUMENT’

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Scientists, no doubt, are having a great time today looking at all the cosmic rays being picked up by the Alpha Magnetic Spectrometer just installed on the International Space Station.

Astronaut Mark Kelly said Friday that delivering the AMS to the orbiting laboratory “was really the highlight of my career.”

“I think it will be one of the most historic things that has ever been done in NASA,” Sen. Kay Bailey Hutchison said after she and Kelly took Nobel Prize winner Samuel Ting on a tour of the Johnson Space Center.

The Massachusetts Institute of Technology professor designed and built the AMS.

Speaking at a press conference at JSC’s Rocket Park after the tour, he said the AMS “will support many kinds of science and already – in less than a month – has collected one billion cosmic rays from the far reaches of space.”

Then thanking the senator for playing a pivotal role in providing legislative authority for the shuttle mission, he went on to say that “the AMS will solve the mysteries of modern physics with great precision.”

“INCREDIBLE INSTRUMENT”

Kelly called the AMS “an incredible instrument that will revolutionize the understanding of the universe,” adding that he was proud “to be involved in a program that is a collaboration of just so many people – 16 different countries, 600 scientists, 60 different universities, the Department of Energy, NASA.

“It really shows how when work together, when we collaborate, we can do something amazing. My crew and I were honored to be part of this project.”

TOOK AWHILE

It took quite awhile to get the AMS added to the shuttle manifest, Hutchison explained. “We did have a hard time really with all the things that had to be put on the ISS. The AMS is a big, heavy piece that has been added. But Professor Ting was able to convince everyone at NASA that this was essential if we were going to get our full use of the space station.”

Hutchison said she was extremely pleased during the JSC tour “to see walk into a room filled with scientists watching all those cosmic rays come in.

“I have long been a supporter of making the best possible use of our great national investment in the International Space Station as a designated National Laboratory,” she said. “The AMS represents a scientific discipline that is unique among the experiments currently aboard the space station.

ONLY WAY

“Scientists have theories about things like Dark Matter, Dark Energy and Antimatter, but these theories have to be tested and challenged. The only way to do that is to have an instrument that can gather the relevant information, and the AMS is that instrument.”

Dr. Ting said the AMS will use the unique environment of space to advance knowledge of the universe and lead to the understanding of the universe’s origin by searching for antimatter, dark matter and measuring cosmic rays which are a significant obstacle to a manned space flight to Mars.

Accurate measurements of the cosmic ray environment are needed to plan appropriate countermeasures. It also will probe the foundations of modern physics.

Mary Alys Cherry