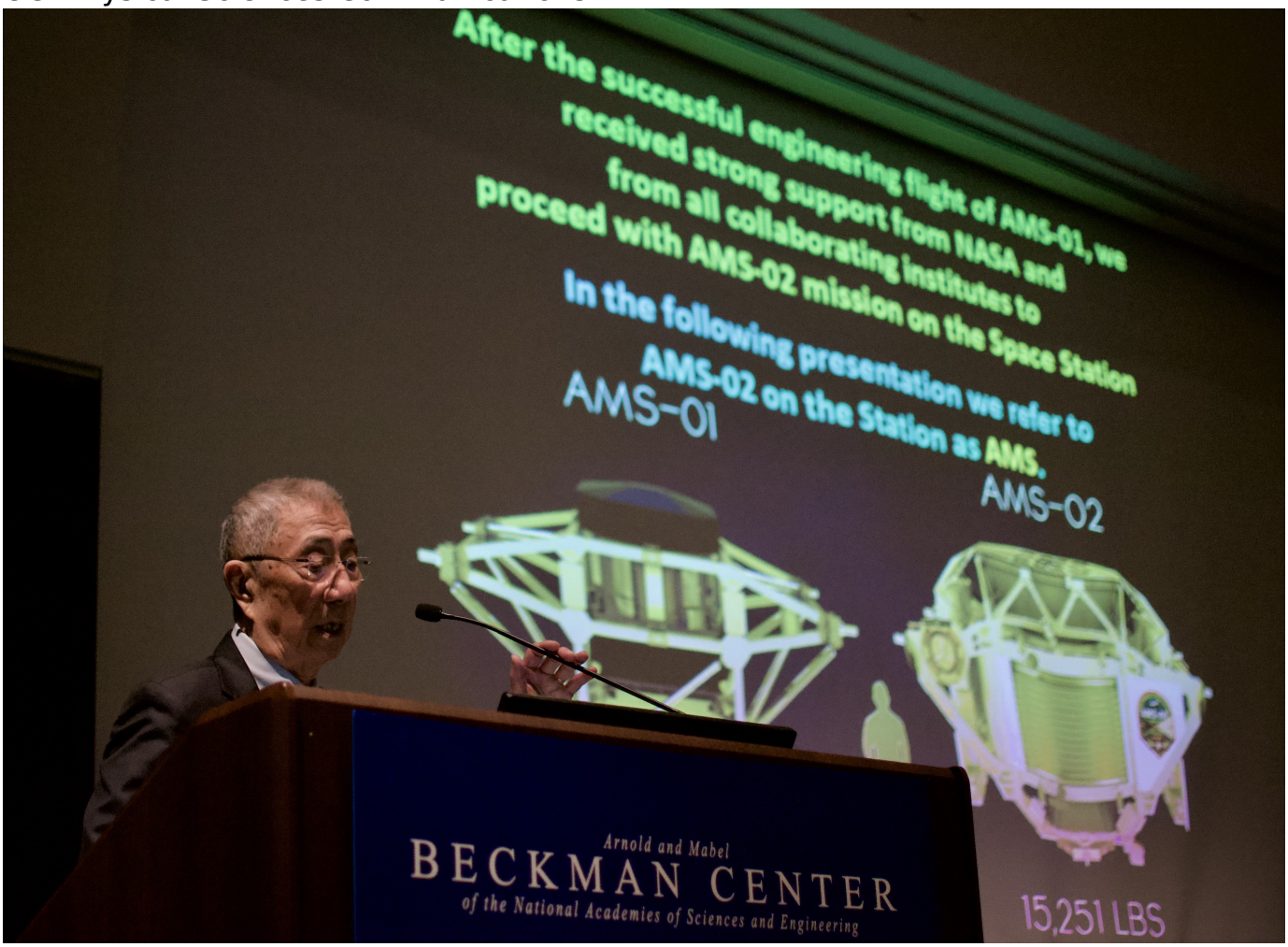
Nobel Laureate Samuel C.C. Ting gives 2023 Reines Lecture

Ting discovered a new kind of quark – a fundamental building block of the cosmos.
Wednesday, February 22, 2023
UCI Physical Sciences Communications



On Tuesday, February 21, Samuel Ting, who's the Thomas Dudley Cabot Institute Professor at the Massachusetts Institute of Technology, delivered the Department of Physics & Astronomy's annual Reines Lecture. Ting won the Nobel Prize in 1976 for being one of two scientists who discovered a new form of matter, the charm quark, a heavier version of the quarks that make up all protons and neutrons and all known matter. Ting is also the principal investigator for the Alpha Magnetic Spectrometer

(AMS) project, which is a particle physics experiment that was installed in the International Space Station in 2011. It's an experiment that detects cosmic rays, and, as Professor Jonathan Feng stated in introducing Ting, it is helping reveal that "empty space actually isn't all that empty. AMS has now detected over 215 billion cosmic particles, and is transforming our understanding of the universe." It's work Feng said a colleague once said was impossible. But Professor and Dean of the UCI School of Physical Sciences, James Bullock, explained before Ting took to the stage at the Beckman Center on campus that it is right in line with the namesake of the lecture series, former UCI physics professor Frederick Reines. Bullock said that Reines, also a Nobel laureate for his co-discovery of another sub-atomic particle called the neutrino, had the kind of derring-do as Ting when it comes to making pioneering discoveries and pushing the edge of physics forward. Ting elaborated on his life's work, and, after his talk, he mingled with UCI faculty and staff to answer their questions.

View photos of the event here.

News Briefs
Physics & Astronomy
The Future of Fundamental Science
View PDF