Dean James Bullock showcases latest James Webb Space Telescope science

The astrophysicist took guests on an intergalactic journey made possible by the new telescope.

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Dean Bullock presents on imagery retrieved from NASA's James Webb Space Telescope.

Picture Credit:
Kelsey Banning

On Tuesday, January 24, Professor and dean of UC Irvine Physical Sciences James Bullock gave a presentation at UCI's Beall Applied Innovation on the latest science emerging from NASA's newly-launched James Webb Space Telescope. Bullock took the audience on a journey that started with the Big Bang, when the only elements in the universe were hydrogen and helium, and brought them through to the present day where astrophysicists like him try to tease apart how things like dark matter – matter scientists think makes up most of the matter in the universe but which no-one has ever detected directly before – govern the motions of things like galaxies. Bullock introduced the Webb telescope and shared how it will be able to see things other telescopes, like the Hubble Space Telescope, cannot, because Webb sees the universe in the infrared part of the electromagnetic spectrum. Infrared light, unlike visible light, can pass through things like dust clouds, which means Webb can see things that were previously hidden to other telescopes. Bullock also touched on how it will help astronomers, including those at UCI, in the search for extraterrestrial life. "We're trying to answer these deep questions. These very deep, important philosophical questions that even transcend humanity," said Bullock. "And the amazing thing is we are able to actually answer some of these questions with JWST." The Webb telescope will be able to help characterize the chemistry of the atmospheres of distant planets, which may contain molecules created by life forms. The School of Physical Sciences, in partnership with the UCI Chief Executive Roundtable, hosted close to 100 guests for this exclusive event. After the presentation, guests participated in a Q&A session with Bullock and joined him for a cocktail reception.

To watch a video reel of the event click here.

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