YORK UNIVERSITY
DEPARTMENTS OF GEOGRAPHY
AND EARTH AND SPACE SCIENCE AND ENGINEERING
and
CENTRE FOR RESEARCH IN EARTH AND SPACE SCIENCE

S E M I N A R

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NASA Goddard Space Flight Center

Beyond Hubble: A New Era in Astrophysics with NASA's James Webb Space Telescope

ABSTRACT

For almost a quarter century, the Hubble Space Telescope has been revealing the unknown cosmos; this single scientific instrument has completely revolutionized our understanding of the Universe. In 2009, the complete refurbishment of Hubble gave new life to the telescope and has produced groundbreaking science results, revealing some of the most distant galaxies ever discovered. Despite the remarkable advances in astronomy that Hubble has provided, the new questions that have arisen demand a new space telescope with new technologies and capabilities. I will present the exciting new technology development and science goals of Hubble's 100x-more-powerful successor, NASA's James Webb Space Telescope (in partnership with CSA and ESA), which is currently being built and tested and will be launched later this decade.

BIOGRAPHY

Dr. Straughn is the deputy project scientist for James Webb Space Telescope Science Communications. She obtained her PhD from Arizona State University in 2008 and has been at Goddard full-time ever since. Prior to her current role she held a NASA Postdoctoral Program fellowship. She has been involved in NASA programs since her undergrad years, beginning with flying an experiment on NASA's microgravity KC-135 plane (the "vomit comet") in 2001. During graduate school at Arizona State, Amber received the NASA Space Grant Fellowship for summer studies, and in 2005 was awarded the 3-year NASA Harriett Jenkins Predoctoral Fellowship. Dr. Straughn's research focuses on interacting and star-forming galaxies in the context of galaxy assembly, where she uses imaging and infrared spectroscopic data mostly from the Hubble Space Telescope. Her broad research interests include galaxy formation and evolution, galaxy mergers and interactions, physical processes induced by galaxy interactions including star formation and black hole growth, and emission-line galaxies.

Refreshments will be served at 3:15 p.m. in Room 422 Petrie Science and Engineering Building.

DATE: **Wednesday, October 1st, 2014**
TIME: **3:30 p.m.**
LOCATION: **Room 422, Petrie Science and Engineering Building**