

PHYSICS AND ASTRONOMY COLLOQUIUM

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"The MOSFIRE Deep Evolution Field (MOSDEF) Survey: A Detailed Census of the Physics of Galaxy Formation in the Early Universe"

<u>Abstract</u>

Understanding the formation and evolution of galaxies remains one of the great challenges of modern cosmology. Key outstanding questions include: What are the physical processes driving the formation of stars in individual galaxies? How do galaxies exchange material with their intergalactic environments? How do the impressive variety of galactic structures that we observe today assemble? How do supermassive black holes affect the evolution of their host galaxies? We present new results from the MOSFIRE Deep Evolution Field (MOSDEF) survey, a comprehensive census of the galaxy population during the peak epoch of activity in the universe ~10 billion years ago. In addition to providing an overview of the MOSDEF survey and its science, we focus on new results regarding the evolving physical conditions in star-forming regions towards higher redshift. Our new results suggest many exciting future observational directions for untangling the detailed nature of star formation in the early universe.

Wednesday, March 16, 2016 3:00 p.m. Bob Wright Centre Room A104