



PHYSICS AND ASTRONOMY

COLLOQUIUM

(Online)

Dr. Michael Balogh
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“The Rise and Fall of Galaxies in a Hostile Universe”

Abstract

“Galaxies, like the Milky Way in which we live, are gravitationally bound structures of stars, gas and dark matter. The growth of these galaxies with time is remarkable for several reasons. One is that the process is extremely inefficient, with only a few percent of all baryons ultimately forming stars. Another is that the galaxy population is very diverse, in stark contrast with the gravitationally-dominant dark matter structures that form the cosmological backbone. In this talk I will focus on what we can learn about the evolution of galaxy populations from a few simple observations of the baryons alone. In particular I will show that these observations require that many galaxies experience a sudden, rapid cessation of star formation that we call “quenching”. The effectiveness of this quenching process is correlated with the large scale environment, and I will conclude with some of our recent results that show how this “environmental-quenching” evolves with time.”

Wednesday, November 24, 2021

3:30 p.m. PDT

via Zoom: <https://uvic.zoom.us/j/83828907799>

*****New Zoom Link*****