

Noel Richardson – Astronomy seminar – 11/14/2018

Title: Looking at the Biggest (Binary) Stars with the Smallest Space Telescopes

Abstract: Massive stars, despite being rare, are important to understanding our Universe - they provide critical feedback to their host galaxies, triggering new star formation, and have strong ionizing radiation fields that can alter their environments. The vast majority of these stars reside in binary systems, so interactions with a companion can alter the course of their evolution. Through detailed analyses of bright, massive stars, we can study the ways in which they evolve and impact their host galaxies. I will detail multiple, on-going studies to understand the ways in which the massive stars interact with their companions. This has been accomplished through a combination of techniques, involving both large and small telescopes, professional and amateur astronomers, and facilities on the ground and in space. Recent observational efforts on the unique binaries WR 140 and eta Carinae will be highlighted.