Nathan De Lee

Title: APOGEE and TESS: Exoplanets and Low-Mass Companions in the Era of Large Surveys

Abstract:

The field of exoplanets and low-mass companions is being revolutionized by large scale surveys. In this talk, I will discuss one on-going and one planned large scale survey. The first of these are the APOGEE-I and APOGEE-II surveys. The APOGEE surveys continue to expand the scale of low-mass radial velocity (RV) companion searches. This includes recent work from the APOGEE radial velocity group on the detection of a gold sample of RV companions, and insight this sample provides on the question of the brown dwarf desert. The second half of my talk will focus on the on-going preparation for the TESS all-sky transit survey, which will launch in late 2017. My work on this consists primarily in helping to develop the TESS Input Catalog. Finally, I will look at future ways in which APOGEE and TESS can complement each other and discuss TESS Follow-up Opportunities.