

PHYSICS SEMINAR

*Department of Physics and Astronomy
East Tennessee State University*

Physics and Astronomy



Manfred Cuntz

(University of Texas at Arlington)

will speak on ...

‘Multiple Suns in the Sky: Updates on Astrophysics and Astrobiology’

Abstract

The aim of my talk is to explore aspects of habitability (i.e., the general possibility of exolife) in binary and higher-order systems, including astrophysical and astrobiological contexts. Aside from single stars (like our Sun), planets have also been identified in binary systems, both regarding S-type and P-type orbits, as well as in some triple and quadruple systems. Previous results on the prospects of habitability in binaries include the calculation of habitable regions based on both gravitational and radiative constraints. However, as planets have also been found in higher-order systems (especially triple stellar systems), statistical analyses for the systems’ structure and composition, as well as the stellar and planetary types, can be pursued. Jupiter-type planets, in principle, may be able to harbor habitable moons. In addition to conveying current findings, possible directions of future research will be discussed as well.



Monday, November 16, 2026, 4:20 PM
Room 265 (D.M. Brown Hall)

