



PHYSICS COLLOQUIUM

2008 Winner of the
Distinguished Alumni Award

Exoplanet Detection and Characterization Status and Prospects



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New Time

Abstract: Nearly 300 exoplanets have been discovered in the past 13 years. We know the approximate mass and orbit of each of these, and for a few we have additional information about radius, composition, and temperature. However for most exoplanets we do not know these properties, nor do we know how they were formed, or whether any may have evolved like the Earth. The discovery of these unexpected exoplanets has ignited a whole new field of inquiry in astrophysics as well as physics and planetary science. One of the attractions is the prospect of finding an Earth-like planet, and searching for signs of life. Another attraction is the sheer joy of discovering and understanding a whole new part of our universe. In this talk I will outline the current measurement techniques and discoveries to date, but focus on future measurement techniques and what we may learn from them.

2241 Chamberlin Hall • Thursday, May 1, 2008 • 5:00 P.M.