



PHYSICS AND ASTRONOMY SEMINAR

Dr. Ilani Loubser

North-West University

“Tracing galaxy evolution with stellar population synthesis”

Abstract

Even in the era of Extremely Large Telescopes, it will remain impossible to resolve individual stars in galaxies outside the Local Group. Instead, we rely on the integrated light that contains the continuous spectrum, absorption lines from the stellar populations, and emission lines from the gaseous ISM. The transformation from the observed, integrated light to meaningful physical parameters requires the careful comparison with predictions of stellar population synthesis models, which are fed by stellar spectral libraries.

We will look at dissecting integrated light from galaxies by means of stellar population analysis, and what we can learn about their formation and evolution using this method. Results from stellar population analysis of the most massive elliptical galaxies as well as dwarf elliptical galaxies will be used as examples.

Wednesday, January 24, 2018

11:00 a.m.

Hickman Building

Room 120