

PHYSICS AND ASTRONOMY COLLOQUIUM

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"Astrophysics' Extreme Matter Experiments: Understanding the Diagnostics"

Abstract

Astrophysical Transients (supernovae, gamma-ray bursts, kilanovae, ...) are often hailed as ideal laboratories to study matter at high temperatures and nuclear densities. But, as with any experiment, what we can learn about the physics of extreme matter depends both on the quality of the experiment: how well we can constrain the initial conditions and how well we can tie the observed diagnostics back to the physics we wish to study. I will review the wealth of diagnostics astronomers gather in astrophysical transients and discuss how these are used to improve our understanding of extreme states of matter.

Wednesday, February 26, 2014 3:30 p.m. Bob Wright Centre Room A104