

SAN DIEGO STATE UNIVERSITY DEPARTMENT OF PHYSICS AND DEPARTMENT OF
ASTRONOMY COLLOQUIUM

Speaker: Matt Darnley (Liverpool John Moores University)

Topic: Accrete, accrete, accrete.....Bang! (and repeat): The remarkable
Recurrent Novae

Time: 12:30 PM, Monday, September 12, 2016 (refreshments served at
12:15 PM)

Place: Room 215, Physics-Astronomy Building (PA-215)

Abstract:

Classical Novae are powered by thermonuclear eruptions on the surface of accreting white dwarfs. By definition, Recurrent Novae are any such systems where two or more eruptions have been witnessed. The recurrent novae typically contain high-mass white dwarfs and are, as such, among the leading Type Ia Supernova progenitor candidates. In this talk I will present the results of the first extragalactic surveys for Recurrent Novae and their own progenitor systems -- both of which had unexpected findings. I will also introduce a remarkable system in the Andromeda Galaxy, which is the 'best' pre-explosion Type Ia Supernova candidate yet discovered -- a system which gives some tantalising hints to how we may one day connect the two phenomena.