### NRAO/Socorro Colloquium Series

**Koji Mukai**

***NASA***

**The Mass of White Dwarfs in Interacting Binaries**

Accretion onto white dwarfs is a moderately efficient energy source and results in a variety of interesting behavior of cataclysmic variables (CVs, whose mass donors are Roche-lobe stars on or near the main sequence) and symbiotic stars (red giants). In addition, accretion alone would lead to the secular growth of the white dwarf mass, which is counteracted by the large mass loss during nova outbursts (thermonuclear runaways when a sufficient amount of hydrogen rich matter is accumulated). The initial white dwarf mass distribution of CVs and symbiotic stars, the secular changes of the mass, and the ultimate fate of these binaries are all interesting questions. I will present a selection of recent results on CVs and symbiotic stars from X-ray and multiwavelength observations that touch on the question of mass. Specific topics include X-ray surveys-ray spectra as white dwarf mass indicator, and the quest to measure the ejecta mass in a variety of novae.

**April 20, 2012**

**11:00 am**

**Array Operations Center Auditorium**

**All NRAO employees are invited to attend via video, available in Charlottesville Room 230, Green Bank Room 137 and Tucson N525.**

Local Host: Michael Rupen