Abstract Submitted
for the DNP07 Meeting of
The American Physical Society

New Insights and Opportunities from Thermonuclear X-ray Bursts TOD STROHMAYER, NASA/GSFC, SUDIP BHATTACHARYYA, UMD/GSFC — The last decade has seen great strides in our observational understanding of thermonuclear X-ray bursts from accreting neutron stars. This observational renaissance has largely been enabled by sensitive, high time resolution observations with NASA's Rossi X-ray Timing Explorer (RXTE). These new observations provide an opportunity to probe neutron stars, and their complex physics, with unprecedented detail. I will discuss recent work on observations and modeling of double-peaked bursts and burst oscillations. This will include a description of what these phenomena can tell us about neutron stars, as well as highlighting the important connections to the nuclear physics which ultimately drives the bursts.

Tod Strohmayer
NASA/GSFC

Date submitted: 29 Jun 2007 Electronic form version 1.4