

Probing neutron stars with Type I X-ray bursts

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Our understanding of nuclear burning on accreting neutron stars has improved dramatically in recent years, driven by new observations of X-ray bursters. In this talk, I discuss two aspects. First, superbursts as carbon flashes and how we can use them to probe the thermal structure of the neutron star interior. Second, mHz QPOs as marginally stable nuclear burning, a new piece of evidence that the accreted material may not cover the whole neutron star surface.