

Abstract Submitted
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Many body effects in neutron star crusts and connection with observables RISHI SHARMA, LANL — Neutron star crusts are relatively clean condensed matter systems where nuclei coexist with electrons and – below neutron drip – neutrons in a superfluid state. Collective effects in this many body system sometimes play important roles in the calculation of properties like heat transport, and charge screening. I will describe the calculation of these properties. They directly effect observables like the profile of surface temperature of a neutron star, and frequencies of oscillations in giant flares.

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