

Abstract Submitted
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Structure of the Highly Magnetized Neutron Star Crust JOSEPH HUGHTO, CHARLES HOROWITZ, Indiana University, JOSE PONS, Universitat d'Alacant — Sharma & Reddy recently investigated how the potential between two ions at high density is modified by the presence of a very strong magnetic field. If the field is high enough, only the first Landau level is filled and this leads to an anisotropic potential with magnetic screening. We take this potential and use Molecular Dynamics to model the crust of a magnetar. We determine the structure of the highly magnetized crust and also compute various transport properties.

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