

Abstract Submitted
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**Uncovering
the Neutron Star Crust using Cooling Measurements¹** MICHAEL ROSS,
WILLIAM NEWTON, Texas AM Univ - Commerce — Neutron stars in binary star
systems accrete matter from their neighboring star, causing their surface temper-
ature to rise. When accretion stops, the neutron star cools. Using cooling data
on neutron stars MXB1659-29 and KS1731-260 and the codes MESA and dStar,
this research modeled neutron star cooling by varying attributes including radius,
mass, density, pressure, core temperature, and impurity in order to determine the
composition of the star. In this talk I will present the results of these simulations.

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