



Contribution ID: 114

Type: **not specified**

Recent results from the Chandra analysis

Wednesday, 16 June 2021 19:00 (25 minutes)

Axions may be produced in abundance within compact stars such as white dwarfs and neutron stars. It has long been recognized that axion production in compact stars opens up a new pathway for them to cool. I will point out, however, that axions may also lead to novel X-ray signatures around these stars, whereby the axions are produced within the stellar cores and then convert to photons in the strong magnetic fields surrounding the stars. I will discuss recent data taken by the XMM-Newton and Chandra telescopes from nearby neutron stars and white dwarfs that provide some of the strongest probes to-date of axions by searching for these processes. In particular, I will focus on the analysis of 40 ks of dedicated Chandra data taken in late 2020 towards the magnetic white dwarf RE J0317-853.

Speaker

Benjamin Safdi

Primary author: SAFDI, Benjamin

Presenter: SAFDI, Benjamin

Session Classification: Session 12