

Ast 25 week 3b: Useful readings/ Homework #04

Wikipedia/internet readings

Dynamic solar system models

(<http://www.skyandtelescope.com/community/skyblog/newsblog/105108519.html>)

Cruithne, a quasi-satellite of the Earth

(http://en.wikipedia.org/wiki/3753_Cruithne)

Heavy duty papers on solar system models:

Masset & Snellgrove 1999 (see the Astro 25 reading room)

Hansen 2009: (see the Astro 25 reading room)

Neutrinos

http://en.wikipedia.org/wiki/Homestake_experiment

<http://en.wikipedia.org/wiki/Super-Kamiokande>

Origin of Neutrino Mass (see the Astro 25 reading room)

Objects of note

http://en.wikipedia.org/wiki/Type_Ia_supernova

<http://en.wikipedia.org/wiki/Pulsar>

http://en.wikipedia.org/wiki/Quark_star

Homework #04 (5 pts):

Write a short essay (300-400 words) describing the key issues involved in the post main-sequence life histories of massive stars. Incorporate, where appropriate, definitions/explanations of *all the key words below*. Provide at least two references you used in your work.

Nuclear fusion

White dwarf

Black dwarf

Electron degeneracy pressure

Chandrasekhar limit

Supernova

Neutrino

Neutron degeneracy pressure

Neutron star

Pulsar

Quark star

Black hole