# Determining the Ages of Stars Using Isotopic Abundances According to Stellar Metamorphosis

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*Abstract: In stellar metamorphosis stars in different stages to their evolution are present in the solar system. They are all mutually exclusive objects not related to the Sun, therefore should all have different isotopic abundances of essentially all elements. Since oxygen has three isotopes that are stable, O-16, O17 and O-18 then we can use their ratios to determine how old a star is, based off simple processes that occur in stellar evolution.*

In stellar evolution according to stellar metamorphosis, oxygen that is lighter would escape the star as the atmosphere thins. This means that the older the star, the more heavy oxygen would be left over in the samples. Since oxygen is stable, none should radioactively decay, so long as the samples are complete we can determine how old the star is by how much relative O-16 it has as compared to O-17 and O-18. The baseline for determining the ages of the stars would start with the Sun and end with the Earth. If the Sun has an isotopic abundance of O-16 of 99.92% as compared to O-17 of .04% and O-18 of .04% then it is younger. Since the Earth's abundances are 99.757% of O-16 then it means the heavier O-17 and O-18 were sinking into the star as it was cooling and dying, forming the planet (evolving stellar core) in its interior. This means it is older. All this means we can predict the O-16 isotopic abundances of Jupiter using stellar metamorphosis. The O-16 abundances should fall in between Earth and the Sun. So if the Sun's was 99.92% and the Earth's was 99.757%, then Jupiter's should be 99.757% < Jupiter < 99.92%. It should fall right in the middle. Not only that but it should be skewed to the Sun's measurements because it is closer in age to the Sun than the Earth. The graph on the next page shows where Jupiter is. The JUNO spacecraft that is taking measurements of Jupiter should discover this.

# The Wolynski-Taylor Diagram



Blue Giants

Small Blue Stars

White Stars

Yellow Stars

Blue Dwarves

Orange Dwarves

White Dwarves

Red Dwarves

STELLAR METAMORPHOSIS

Brown Dwarves

Jupiters

Grey Dwarves

Neptunes

Ocean Worlds

Earths

Venus's

Dead Moons

Size

Luminous Stars cool to become Non-luminous Exoplanets

3M 30M    90M       230M

0  15M  50M  140M   350M  550M  1BN    2BN    5BN    10BN        25BN        65BN

Duration in years