Core Growth Termination During Stellar Evolution in the General Theory of Stellar Metamorphosis

Jeffrey J. Wolynski
Jeffrey.wolynski@yahoo.com
April 16, 2017
Cocoa, FL 32922

Abstract: In the General Theory of Stellar Metamorphosis stars grow iron/nickel cores via vapor deposition and condensation during intermediate stages of evolution. It is proposed that these iron/nickel cores stop growing for a few reasons provided.

In stellar metamorphosis, all stars are young planets, meaning the two are actually the same objects, some just give the appearance of being mutually exclusive based on mass, brightness, density, elemental composition and other factors which are explained by the theory. Since they are the same objects, and the process of core formation happens as they evolve because Earth and Mercury and other highly evolved stars have iron/nickel cores, we must give reasons why the core should stop growing, or vapor depositing in the central regions of the star. This can allow us to set a lower age limit on the star as well explain how much material was probably present in the dense atmosphere of the star as it was forming the core.

1. The young homogeneous stars can run out of iron/nickel to collect as it travels in interstellar space.
2. The homogeneous star starts off with a specific amount of iron when it is born, or maybe no iron at all as it all is collected as it travels through intergalactic space. In either case, it collects a set amount of iron/nickel with which it forms the core. This means,
3. It absolutely has to collect the iron when the iron is vapor, or else, no iron can move to the center of the object, as well since it entered the star as a solid object, it more than likely was obliterated into vapor as well as ionized. An iron asteroid the size of a battleship slamming into the Sun at velocities approaching Mach 500 would remove all solidarity of the asteroid. The star breaks up the material to accrete material in a pure manner.
4. Since it has to be iron/nickel vapor to form the core it likely slowly deposits into a thick liquid which then is pressurized, cools very slowly and is transformed into solid iron/nickel alloy as observed in meteorites
5. This means we have to assume that if the star is not mostly gaseous, then core formation has completed, because the conditions for core material transport and vapor deposition, solidification and condensation of the iron/nickel vapor are no longer present.
6. It is predicted that the very central iron/nickel core formation has completed when the magnetic field can be completely offset from the parent bodies' axis of rotation, this

signals the core is one complete structure, which provides a singular magnetic field as it rotates as a complete body in the internal regions of the star.

7. This being said, if a star has a magnetic field offset from its axis of rotation, then it has a completely formed core. If it does not, and the global magnetic field is completely centered on the axis of rotation, then the very centralized iron/nickel core is not done forming.
8. This means that we can also make another prediction using stellar metamorphosis, since red dwarf stars do not have fully formed cores, as they are just beginning stages of forming their global magnetic fields, their global magnetic fields should start forming in line with their axis of rotation, which then can become offset during orbit changes, as proposed by Inertial Core Theory http://vixra.org/pdf/1209.0080v2.pdf
9. If we find a red dwarf star with a strong global magnetic field completely offset from the axis of rotation, then this prediction needs to be further refined to account for the new observations.