

Stellar Evolution and Planet Formation are Mass Loss Phenomenon

Jeffrey J. Wolynski
Jeffrey.wolynski@yahoo.com

December 13, 2020
Cocoa, FL 32922

Abstract: It is explained using the general theory planet formation and stellar evolution are mass loss phenomenon, ipso facto is the same process. Planets are old stars or stars are young planets.

In stellar metamorphosis, a star loses mass as it evolves becoming the “planet”, according to the mass loss principle of stellar metamorphosis. This means that planet formation is stellar evolution. Since the star loses mass to become the planet, then it follows that planet formation itself is a mass loss phenomenon, as the planet started out much more massive in its past. Therefore, the concept of “planet growth” during planet formation is misguided. The mass that an older star started out with was huge and has diminished as it cooled down. This means what is being taught in universities is misguided. As a newer example, their misguided reasoning is exhibited and corrected in Daniel Archer’s paper, regarding red dwarfs flaring and becoming brown dwarfs.^[1]

Establishment: Planet formation requires that a planet start small then grow, (start really small as dust particles). Planet formation is a mass gain phenomenon and is not related to stellar evolution.

Stellar metamorphosis: Planet formation has more massive objects losing mass over very long periods of time, (start really big, then become much smaller). Planet formation is a mass loss phenomenon as well as stellar evolution, as they are the same process.

It is another Ockham’s Razor. We can have:

1. Establishment: Planets gaining mass to form, and stars’ evolutionary paths neither gain or lose mass in significant amounts (remain static).
 - A. Static and mass gaining structures. (2 mutually exclusive processes regarding mass).
2. Stellar metamorphosis: Stars losing mass to become planets, so both lose mass.
 - B. Just mass loss structures. (1 process regarding mass)

It is clear the what the obvious choice is using Ockham’s Razor: Planets are stars that have lost their mass, meaning they are older, highly evolved stars. They were never mutually exclusive objects, regardless if the Ancient Greeks thought so.

This is an important discovery in light of modern astronomical discoveries of exoplanets (evolving/evolved stars) which have wildly different masses on a continuum. It also has ability to

properly place stellar mass loss as not being the exception to the rule of stellar evolution, but the rule of stellar evolution. All stars are destined to lose all of their mass, there are no exceptions. The rate at which they lose their mass can vary [3], but none the less, the star will recycle itself.[2] Certain considerations towards mass loss and conservation of angular momentum should also be considered, both in terms of orbital changes and axial angular momentum diminishing as the stars evolve. These ideas are outlined incompletely in the new gyrochronology.[4]

References

[1] Archer, Daniel I., Stellar Metamorphosis: Red Stars Evolve into Brown Dwarfs, Vixra.org 2020-12-12 09:36:58, <https://vixra.org/pdf/2012.0087v1.pdf>, Retrieved 12/13/2020

[2] Archer, Daniel I., Archer's Law: Stellar Metamorphosis Obeys the Natural Law of Birth, Growth, Degradation and Rebirth or a New Law!, Vixra.org 2020-11-16 14:17:16, <https://vixra.org/pdf/2011.0128v1.pdf>, Retrieved 12/13/2020

[3] Wolynski, Jeffrey J., The Variable Rate of Mass Loss Principle of Stellar Metamorphosis, Vixra.org 2018-06-28 15:06:46, <https://vixra.org/pdf/1806.0440v1.pdf>, Retrieved 12/13/2020

[4] Wolynski, Jeffrey J., Gyrochronology, Version 4, Vixra.org 2019-12-25 16:03:06, <https://vixra.org/pdf/1906.0146v3.pdf>, Retrieved 12/13/2020

