

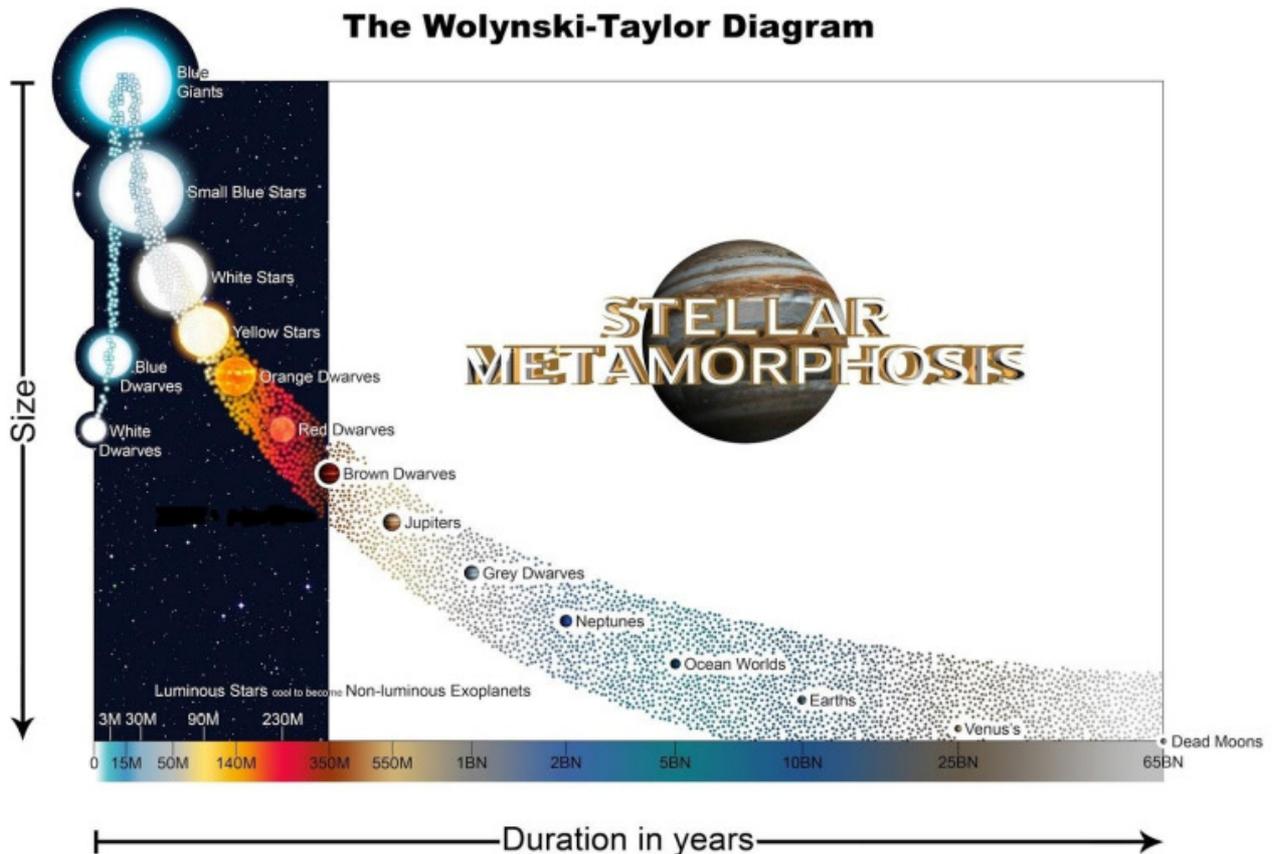
# Stellar Metamorphosis: Astron Classification Table

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**Abstract:** I present a classification table of astrons<sup>1</sup> made possible due to the theory of Stellar Metamorphosis<sup>2</sup> (GTSM).

In humanity's future observations of our galactic neighbourhood; the expectation is that we will find many more older astrons around younger astrons, this is in accordance with GTSM. Due to this and that in this theory stars and planets are the same objects just in different stages of evolution we have to make a new classification table. This so we can understand where to place new findings and to be able to make predictions in what stage a newly found astron is in, we would instantly be able to say a lot about that newfound astron, based on other tenets of GTSM.

There is already the Wolynski-Taylor diagram:



You can see that as astrons age they get cooler, smaller and there is a point where they stop shining. For the classification we will group astrons according to their matter phase state (Plasma, Gas, Liquid, Solid). This will make 4 major types that we are going to call Population<sup>3</sup>, where the phase of the matter of that astron is mostly in that phase, specifically at the beginning of that phase. The Populations will be designated I to IV in Roman numerals.

At any point during stellar evolution multiple phases of matter exist in that object to different degrees. Generally the young astrons are only in the plasma phase (Population I), but as astrons age, more and more phases are present at the same time to variable degrees.

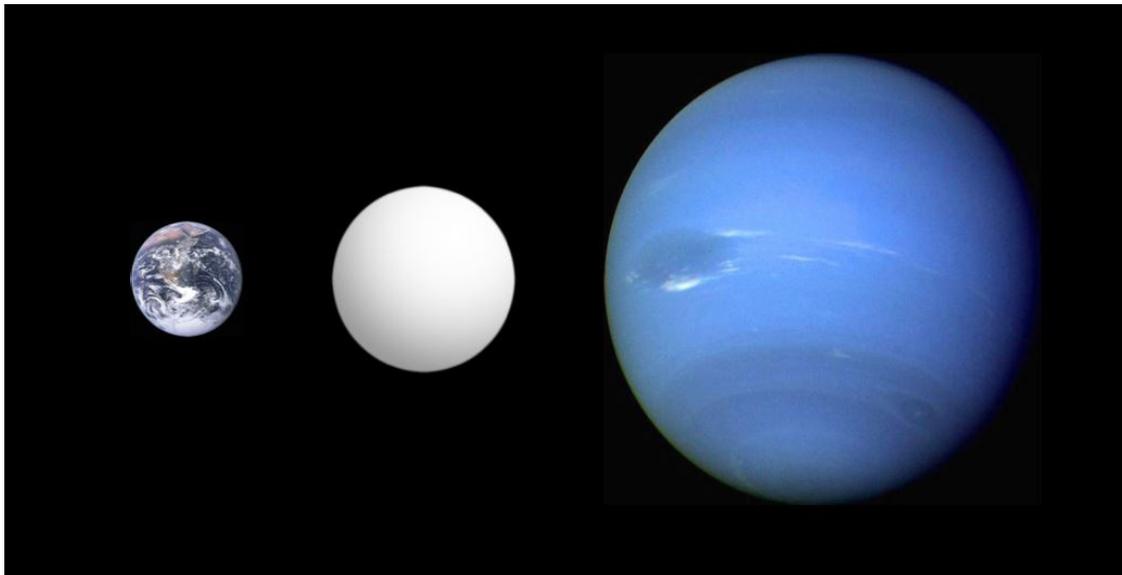
Within the Populations we can identify a few different type of astrons and they are given a type name. I tried to stay within the normal naming conventions and only added more logical names where applicable, i think they speak for themselves.

On the left side i placed an arrow of time, to distinguish this table from any other conventional stellar or planetary classification tables and to firmly show this is a table concerning GTSM; in time astrons become cooler and smaller and you can see that in the table.

Temperature is mostly associated with plasmatic astrons (Population I) and to a lesser degree with gas giants, yes they have measurable temperatures but once the plasmatic phase of an astron is over assigning temperature becomes less meaningful. This is because an astron at that stage will have its temperature mostly determind by the type of its parent astron and the distance to this parent and to a lesser degree its own internal heat (and the external or outer heat is gone). That is why from the last gas type astron the table indicates N/A (not applicable).

The size is given in Solar radius, this makes sense for large astrons in the plasma phase , less for smaller astrons, but you do get a sense of how much smaller they get. Also now with choosing only solar radius as a distance measurement you can see there are no gaps, it is a continuum. There are astron types for each size, so any size we find out there fits into this table.

The last column gives examples to get a sense that real discovered astrons fit into this table, also astrons discovered outside our own solar system. One example is Corot-7b:



Comparison of best-fit size of Corot-7b with Earth and Neptune, as reported in the Open Exoplanet Catalogue<sup>4</sup>

We do have to assume astronomers have the size right for this world<sup>4</sup>, but if they do than you can see it really is a pre-earth, closer in size to Earth than Neptune. If you would look up GJ1214-b (Gliese 1214 b) you would see it is closer in size to Neptune than Earth (or in between and at least larger than Corot-7b) and designated as a water world, just above pre-earth type in the table.

On the next page the Astron Classification table is presented.

## Astron Classification table:

Time	Population	Type	Temperature (K)	Size ( $R_{\odot}$ )	Examples
	I Plasma	Blue	10000-40000	1.8-8.2	Zeta Ophiuchi / Regulus
		White	7500-10000	1.4-1.8	Sirius A
		Yellow	5200-7500	0.96-1.4	Procyon A / Sol
		Orange	3700-5200	0.7-0.96	Alpha Centauri B
		Red	2400-3700	0.3-0.7	Proxima Centauri / Gliese-229A / Teide 1
		Brown	500-2400	0.12-0.3	Gliese-229B
	II Gas	Gas Giant	300-500	0.1-0.12	WISE1828 [tentative]
		Gas	125-300	0.08-0.1	Jupiter / Saturn
		Gas Dwarf	N/A	0.035-0.08	Neptune / Kepler-11e
	III Liquid	Water World	"	0.0186-0.035	GJ1214-b / Kepler-22b
		Pre-Earth	"	0.0134-0.0186	Kepler-10b / Corot-7b
		Life host	"	0.009-0.0134	Earth / Kepler-186f
	IV Solid	Post Life	"	0.004-0.009	Mars, Venus
Core world		"	0.001-0.004	Mercurius, Callisto	
Debris		"	<0.001	Small moons, asteroids	

- 1 M. Zajaczkowski, Star and Planet: Stages of Astron Evolution: <http://vixra.org/pdf/1510.0381v1.pdf>
- 2 J. Wolynski, An Alternative for the Star Sciences: <http://vixra.org/pdf/1205.0107v9.pdf>
- 3 J. Wolinsky, New and old stars: <http://www.vixra.org/pdf/1406.0102v1.pdf>
- 4 Léger, A.; et al. (2009): <https://www.aanda.org/articles/aa/pdf/2009/40/aa11933-09.pdf>