

# What if white dwarf stars are actually earth like planets

Daniel Archer I  
[D\\_Archer@live.nl](mailto:D_Archer@live.nl)  
danielarcher369.wordpress.com  
29 October, 2023  
Amersfoort, NL

**Abstract:** Some objects currently classified as 'White Dwarf stars' are reclassified according to their given radius as per Stellar Metamorphosis<sup>1</sup> in a 'what if' scenario; explanations provided.



In an earlier paper<sup>2</sup> i explored what "white dwarfs" are or can be and explained their place within Stellar Metamorphosis. For this paper i propose a radical new idea that applies to some but not all objects that are currently labelled as 'white dwarf stars' in standard astronomy. This idea is speculative but i want to mention it for histories sake. I searched if this idea has already been proposed by someone else but i could not find it, so this is the first time this idea is proposed (if not please let me know).

Before i go further; i again provide an original quote by Arthur Eddington<sup>3</sup> that was also in my previous paper about about White Dwarf stars:

*"We learn about the stars by receiving and interpreting the messages which their light brings to us. The message of the Companion of Sirius when it was decoded ran: "I am composed of material 3,000 times denser than anything you have ever come across; a ton of my material would be a little nugget that you could put in a matchbox." What reply can one make to such a message? The reply which most of us made in 1914 was—"Shut up. Don't talk nonsense."*

A material 3000 times denser than anything we have ever witnessed before is indeed absurd, it still is and always will be, this because it is nonsense. The gut feeling of the astronomers of the time was correct. Even though there are collider experiments where it is said that such dense matter is formed it is still not observed directly; it is only an allusion. The idea only exists in the mind not in reality.

This leads to the idea that if mainstream astronomy is wrong about the density of these objects but right about the radius, what else could these objects be? This paper explores that idea.

I have classified all stars and planets within 20 light years<sup>4</sup> with the help of the Astron Classification table<sup>5</sup> and in this volume of space there are 6 'White Dwarf stars' , i made a table to have a good overview of their characteristics; I also put in our Sun (Sol) for comparison:

WD Stars	ly	Temp (K)	Mass ☉	Radius ☉	Luminosity ☉
Sirius B	8,6	25193	1,018	0,0084	0,0056
Procyon B	11,4	7740	0,602	0,0123	0,00049
van Maanen 2	13,9	6220	0,68	0,011	0,00017
LP 145-141	15,1	8500	0,75	unknown	0,0005
40 Eridani B	16,5	16500	0,573	0,014	0,013
Stein 2051 B	18,1	7050	0,675	0,0111	unknown
//					
Sol	0	5772	1	1	1

Table 1

For this paper we are assuming that mainstream astronomy does have the radius correct for these objects, what happens when we classify these objects as per the Astron Classification table, see Table 2 below:

Astron	Radius (sol)	Classified as (what if)
Sirius B	0,0084	Post Life
Procyon B	0,0123	Earth-Like almost Pre-Earth
Van Maanen 2	0,0138	Pre-Earth
LP 145-141	0,01	Earth-Like
40 Eridani B	0,014	Pre-Earth
Stein 2051 B	0,0111	Earth-Like
//		
Earth	0,009	Earth-Like

Table 2

As you can see in Table 2 the radius of these objects classifies them as Post Life, Earth-Like and Pre-Earth. I have changed the naming of Life Host to Earth-Like, this because ocean worlds and pre-earths can also have life on them. Van Maanen 2 now has a given solar radius of 0,0138, so this is updated in the table. LP 145-141 has a radius now and this is updated too. I have replaced Sol with Earth; now you can see that these Astrons classified as "White Dwarf stars" are generally (given to be) larger than the Earth. Sirius B is the exception here, more on that later.

So what if this new classification is actually correct? Can it be correct? There are a lot of questions raised because of this. I will typically provide explanations that support this new classification.

#### White light, dim light (or diffuse light)

A characteristic that all these 'white dwarf' objects share is that their light is white and that they are generally very dim compared to actual stars. If they are not 'stars' as generally understood, how can this be explained?

First a little history, see this quote from Wikipedia about 40 Eridani B:

*"In 1910, it was discovered that although component B was a faint star, it was white in color. This meant that it had to be a small star; in fact it was a white dwarf, the first discovered.[30] Although it is neither the closest white dwarf, nor the brightest in the night sky, it is by far the easiest to observe; it is nearly three magnitudes brighter than Van Maanen's Star (the nearest solitary white dwarf), and unlike the companions of Procyon and Sirius it is not swamped in the glare of a much brighter primary"*

I highlighted the made assumption in red, because the light is white it has to be a star. But is this a correct assumption? What else can the cause of white light be? If 40 Eridani B is a pre-earth there are at least two ways in which it (and any of the 6 white dwarfs we are looking at) could give off white light:

- 1) If the atmosphere is completely filled with white clouds. This could be because pre-earths still have very thick atmospheres and also their crust is coming up above the waters and there is a lot of steam and volcanic activity further thickening the cloud cover. This white cloud cover can have an albedo of 99%\*. If most incoming light is reflected; that could explain the white light as the incident star light is also white. The dimness is explained because this is diffuse reflection, incident light is scattered in all directions.
- 2) If it is a snowball planet, ie it has a complete frozen surface and the ice has an albedo of 99%\*. There is a comparison in our Solar system with Enceladus which also has a very high albedo.

\*An albedo of 99% may not be enough to explain the light, as these objects are still very bright, not bright compared to stars but still very bright. To explain how/why we can observe these objects it could be that they also produce light. The researcher Miles Mathis has written about Enceladus<sup>6</sup> and has provided a new avenue of research that could give an explanation for why we can see 'white dwarfs', i quote:

"After running my own numbers, I could see that Enceladus' "reflectivity" is well above 100%"

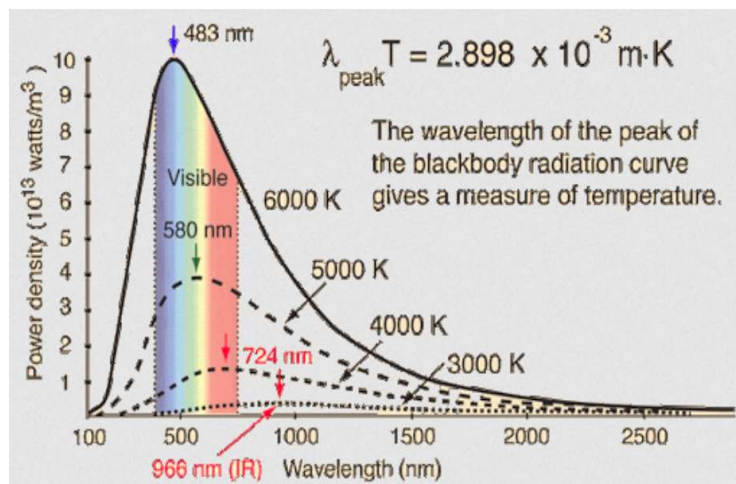
"Turns out Enceladus has a geometric albedo way over unity, with a value of 1.4. That means it is actually reflecting more light than is falling on it, by the current rules of scattering. My theory explains that easily, since I have shown the source of light creation locally: Enceladus is a creator of brightness via the magnetic reaction with the charge field"

next to "normal reflection, we also have bigger magnetic effects that are due to these photon-antiphoton collisions. This effect has a similar effect to an atmosphere, since it has the ability to redirect and rerandomize the vectors, explaining a second diffusion of the light. The ambient charge field acts as this diffuser, in the same way an atmosphere would, except on a smaller scale. An atmosphere diffuses photons with molecules and ions, but this effect diffuses photons with anti-photons, at a tight charge boundary"

Miles Mathis has supplied a third way in which astrons can be bright and give off white light. This photon/magnetic effect also strengthens and/or supports way 1) and 2) above. White light is thus not beholden to stars only, planets under certain circumstances can also produce white light. These effects should be further researched and i encourage astronomers to take another look at the local white dwarfs and revisit their spectra.

## Temperature

The temperature of stars can be indirectly estimated by a variety of methods. Every different method is based on the light spectra that the star emits. Below is a picture of one of the methods called Wien's Displacement Law<sup>7</sup>:



You can see that the temperature of stars (which is above 6000 Kelvin) is determined by the wavelength of the

light in the visible range. On the next page is a table of the temperature and luminosity of the 6 local white dwarfs we are looking at:

White Dwarf Stars	Dist. in ly	Temp (K)	Luminosity (sol)
Sirius B	8,6	25193	0,0056
Procyon B	11,4	7740	0,00049
van Maanen 2	13,9	6220	0,00017
LP 145-141	15,1	8500	0,0005
40 Eridani B	16,5	16500	0,013
Stein 2051 B	18,1	7050	unknown
//			
Sol	0	5772	1

Table 3

You can see in *Table 3* that Sirius B has the highest temperature in Kelvin, this is estimated because it gives off blue light in the visible range which means higher power in Wien's Law. Sirius A is said to have a temperature of around 9940 Kelvin, because the light is white this is lower on the power spectrum than blue light. See image below to visualize this:



So you have a large white star that is cooler than a small star? That is not logical at all; is there something wrong with a method that uses the color of light to assign a temperature? This author states that could very well be the case. At least it should be clear that it is unreasonable to have a large star with a lower temperature than a smaller world.

A different explanation for the blue light is again the photon/magnetic effect idea where the energetic atmosphere creates the blue light. This would mean the actual temperature of the world below does not have to be that high, it may very well have a "cool" atmosphere that likely can no longer support life.

### Luminosity

Luminosity is based on "stored thermal energy", so if a white dwarf star has a luminosity it is releasing stored thermal energy and thus cooling itself in the process. As per *Table 3* above the closest white dwarf "stars" have a very low luminosity, this is another clue that their temperature is not really as high as given and also that they are not really stars (by the classic definition) as stars have significantly higher luminosities, for comparison our sun (Sol) has a luminosity of 1.

---

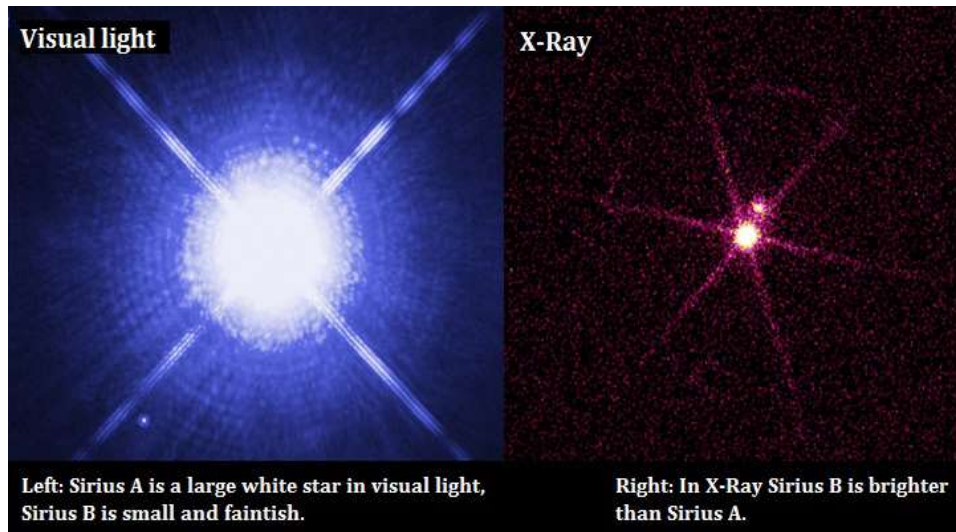
*Next i will look at each white dwarf "star" with the idea that they are actually pre-earths, earth-like, post-life worlds.*

---

### Sirius B

As per *Table 2* above; Sirius B is the smallest white dwarf in our local stellar neighbourhood. If it is not a

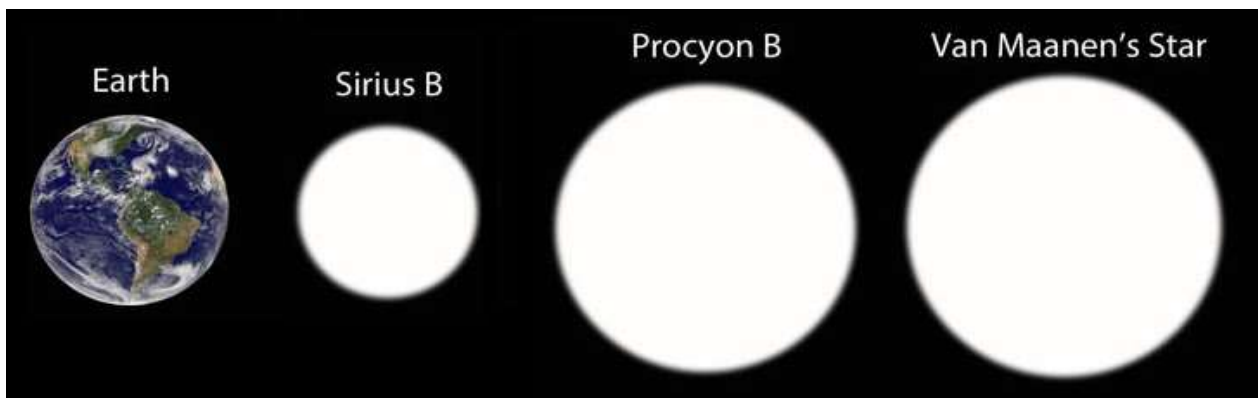
star what else could it be? I have classified it as a post-life astron, but how is this possible? In the image below you can see Sirius A and B. In visual light Sirius A (a white star) far outshines Sirius B (the small dot on the lower left). However, in the X-Ray Sirius B outshines Sirius A, what is happening here?



To get to the beginnings of an answer we can look at Miles Mathis's photon/magnetic effect idea again. If Sirius B is smaller than the earth and due to an interaction with its parent star the photon-antiphoton interaction also produces x-rays. Within the charge (photon) mechanics of Miles Mathis; x-rays are spun up photons. In the case of Sirius B it being smaller (higher outgoing charge density from the surface) and its parent star being a white star (very energetic) it receives a lot of photons and thus there are more photon-aniphoton interactions this enables the production of x-rays. So it is possible to be a post life world and give off white light and x-rays.

### Procyon B

This white dwarf is located in the constellation Canis Minor and is not visible with the naked eye due its low luminosity. I would say that is a hint that we are not looking at a star, at only 11 light years away an actual star would certainly be visible to the naked eye. Further the mass is said to be unusually low for a white dwarf star, but to this author the mass is still much too high. I have not included mass in the tables as there is too much wrong with how mass is determined in standard astronomy.



### Van Maanen 2 (or Van Maanen's Star)

This is the first discovered white dwarf to be solitary, ie it does not have a companion (larger) star. It also has the lowest luminosity out of all the white dwarfs we are looking at in this paper and thus Van Maanen's Star is also not visible to the naked eye, just like Procyon B.

This author states that this low luminosity is due to it lacking a parent star and this makes it receive less light (photons) to produce extra light via the photon/magnetic effect. Its temperature is also very low for a white dwarf, again this is likely due to it lacking a parent star and thus having a less energetic upper atmosphere.

An interesting note is the presence of metals, i quote wiki<sup>8</sup> :

"a significant presence of heavier elements in its spectrum – what astronomers term metals..."<sup>9</sup>

...for heavier elements to appear here **requires a recent external source...**<sup>10</sup>

...the surface of the star was likely strewn with circumstellar material, such as from **the remains of one or more rocky, terrestrial planets.**"

I highlighted an assumption in red. See below about 'metal-rich white dwarfs', they can not have the metals be a natural part of the white dwarf. This author states that detections of metals in white dwarf atmospheres hints at their true nature. I bolded ' the remains of one or more rocky, terrestrial planets', because if Van Maanen 2 is a pre-earth then it would not be remains but actually part of the object itself. This would be a more logical assumption.

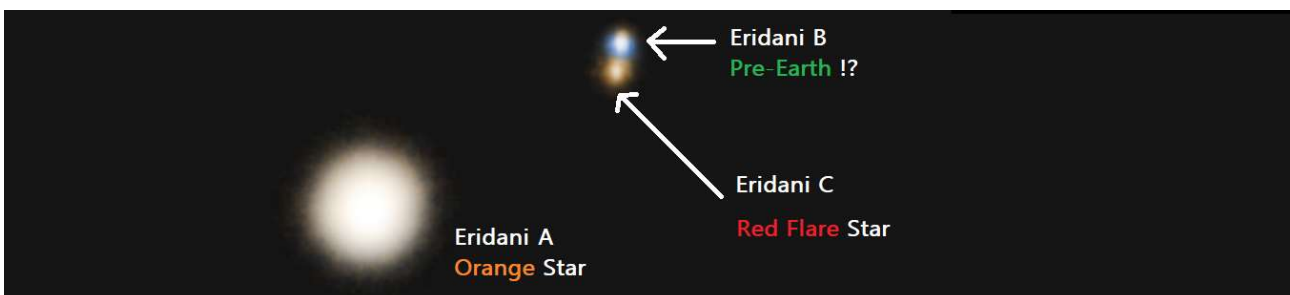
#### LP 145-141

This white dwarf also does not have a parent star, just like Van Maanen's Star, but it does move within a group of stars called Wolf 219. Further it is said that LP145-141 is a rare type of white dwarf that has carbon in its atmosphere<sup>11</sup>. Next to carbon there was also oxygen detected. Not much more i could find, but with this idea that LP145-141 is Earth-Like, the carbon and oxygen observations are pretty spectacular.



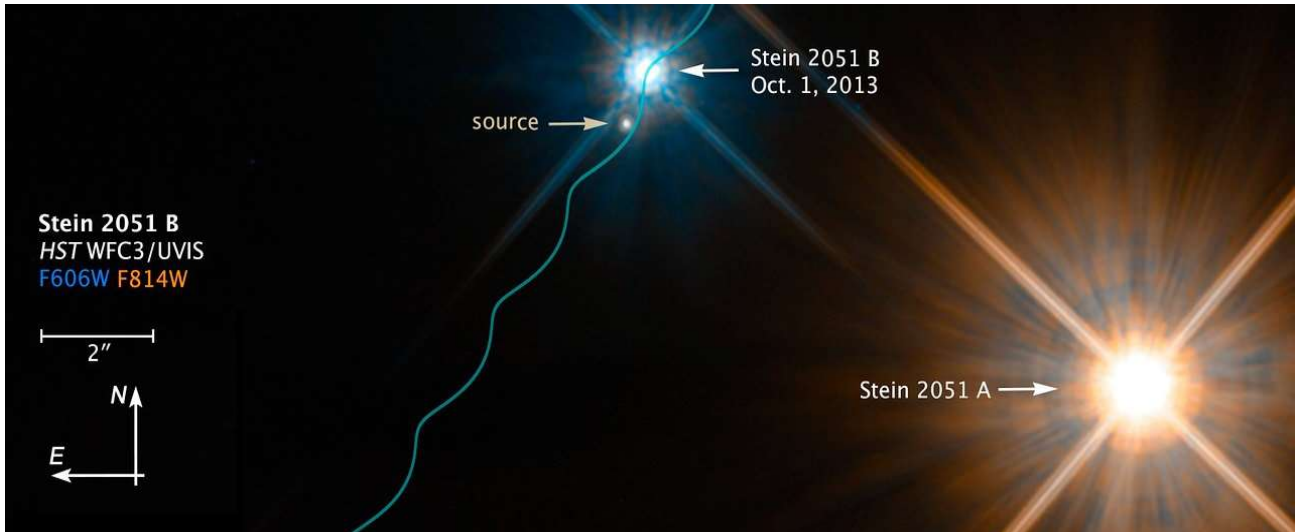
#### 40 Eridani B

The first discovered white dwarf "star" that may very well be a pre-earth world. In *Table 3* you can see its temperature is high 16500 Kelvin and the luminosity is also high. This is likely due to the fact there are 2 other stars around; Eridani A and C. This would increase the photon/magnetic effect discussed earlier.



### Stein 2051 B

This white dwarf has a red star (Stein 2051 A) as its parent star. Again astronomers say the smaller, dimmer "star" is more massive and hotter than its parent star. Which is completely illogical. It is more likely that the photon/magnetic effect is at play here too. The photons of the bright active red star are interacting with the atmosphere of the smaller Earth-like world. See the image below (it is a composited image), the source is said to be a star much farther away (5000 ly) and used to determine the mass of Stein 2051 B. I will not state the problems i have with this in this paper, but these calculations and methods are highly suspect. Also it could be the smaller object is not far away but a moon of Stein 2051B, how cool would that be.



*Credit: NASA, ESA, and K. Sahu (STScI)*

---

*Another hint*

---

### Metal-rich white dwarfs

In this 2015 study by David J. Wilson et al<sup>12</sup> it is observed (though spectrographic measurements) that Ton 345 (a white dwarf) has metal abundances consistent with those of a differentiated, rocky planet.

Instead of saying (like this author) that the white dwarf could be an actual rocky planet they say:

*"The origin of these metals is **almost certainly** the circumstellar disc of dusty and gaseous debris from a tidally-disrupted planetesimal"*

I think the observation is clear, but they have to invent a meteorite being destroyed to account for the observation because in standard astronomy it is not possible for a white dwarf to have a rocky planet spectra.

---

*Final remarks and asking a question*

---

In this paper i classified known objects called 'white dwarfs' and classified them as pre-earth, earth-like and post-life worlds in a 'what if' scenario. When i first entertained this idea i thought it was too outrageous and spectacular to be true. After the research above i am starting to think it is at least a much better idea than the standard astronomy nonsense of objects made of super dense material. At least this idea invites much more research and a closer look at the white dwarf labelled objects closest to us.

For fun i asked chatGPT 'the' question:

**Is it possible that white dwarf stars are actually earth like planets?**

Answer:

White dwarf stars are not Earth-like planets; they are quite different celestial objects. Here's the key distinction between the two:

1. White Dwarfs:

- White dwarfs are the remnants of low to medium-mass stars (like our Sun) after they have exhausted their nuclear fuel. When these stars run out of fuel, they undergo a series of stages, eventually shedding their outer layers and leaving behind a dense, Earth-sized core composed mainly of carbon and oxygen.
- White dwarfs are incredibly hot and dense, with temperatures ranging from about 10,000 to 100,000 degrees Kelvin. They are much hotter and denser than any planet.
- They do not have solid surfaces like planets; instead, they consist of incredibly compressed matter in the form of a dense plasma.
- White dwarfs do not support life and are not suitable for human habitation.

2. Earth-like Planets:

- Earth-like planets, such as Earth itself, are rocky or terrestrial planets that orbit stars like the Sun. They have a solid surface, an atmosphere, and conditions that can support life as we know it.
- These planets are much cooler and less dense than white dwarfs. They are suitable for liquid water and the development of life, under the right conditions.

In summary, white dwarf stars and Earth-like planets are distinct types of celestial objects with vastly different properties, compositions, and conditions. **White dwarfs are the remnants of stars, while Earth-like planets are celestial bodies in their own right**, potentially capable of supporting life if they meet the right conditions.

A standard answer. I bolded an interesting part; calling Earth like planets celestial bodies in their own right but not remnants of stars, alas.

Vera perceptio non facilis est ac fortitudinem cogitationis  
requirit ut a praeconceptis notionibus et dogmatibus  
erumpere possit

Reference on the last page.



## References:

- 1) J. Wolynski, 2012, An Alternative for the Star Sciences: <http://vixra.org/pdf/1205.0107v9.pdf>
- 2) D. Archer, 2019, Stellar Metamorphosis: What are White Dwarf Stars?:  
<https://vixra.org/pdf/1904.0046v1.pdf>
- 3) Eddington, A. S. (1927), *Stars and Atoms*
- 4) D. Archer, 2019, Classification of Astrons Within 20 Light Years: <http://vixra.org/abs/1902.0049>
- 5) D. Archer, 2017, Stellar Metamorphosis: Astron Classification Table: <https://vixra.org/pdf/1712.0460v1.pdf>
- 6) Miles W. Mathis, 2013, More on Encedalus and Albedo: <http://milesmathis.com/encel2.pdf>
- 7) Wien's Displacement Law, Wikipedia: [https://en.wikipedia.org/wiki/Wien%27s\\_displacement\\_law](https://en.wikipedia.org/wiki/Wien%27s_displacement_law)
- 8) Wikipedia, Van Maanen 2, chapter: Characteristics: [https://en.wikipedia.org/wiki/Van\\_Maanen\\_2](https://en.wikipedia.org/wiki/Van_Maanen_2)
- 9) J. Farihi, 2011, Evidence for Terrestrial Planetary System Remnants at White Dwarfs:  
<https://arxiv.org/abs/1010.6067>
- 10) J. Farihi et al, 2010, Rocky Planetesimals as the Origin of Metals in DZ Stars:  
<https://arxiv.org/pdf/1505.07466.pdf>
- 11] D. Koester et al, 1980, A strong absorption feature near 1900 A in the spectrum of the C2 white dwarf LP 145 141: <https://adsabs.harvard.edu/full/1980A%26A....83L..13W>
- 12) David J. Wilson et al, 2015, The composition of a disrupted extrasolar planetesimal at SDSS J0845+2257 (Ton 345): <https://arxiv.org/abs/1505.07466>