

# Olbers' Paradox

The background story of this paradox can be easily found in Web such as

[http://en.wikipedia.org/wiki/Olbers'\\_paradox](http://en.wikipedia.org/wiki/Olbers'_paradox)

Base on spherical attenuation, the night sky is dark as supposed to be as bright as or brighter than day light. There is no adequate explanation in current science knowledge. It could actually indicate particles are not following the rule of spherical attenuation which could be very possible to derive from my theory.

The distance of sun from earth is defined by 1 AU.

I am assuming all Suns or stars are of equal brightness.

First of all I will use two very important basic rules that are used to support my science theory.

<http://echofromfuture.com/>

## **The attenuation is the inverse of the square of distance.**

Base on spherical attenuation, if we double the distance of Sun and Earth, we will have 4 times of attenuation of brightness at day light. If we triple the distance of the SUN and Earth, the day light attenuation will attenuate to one ninth (1/9).

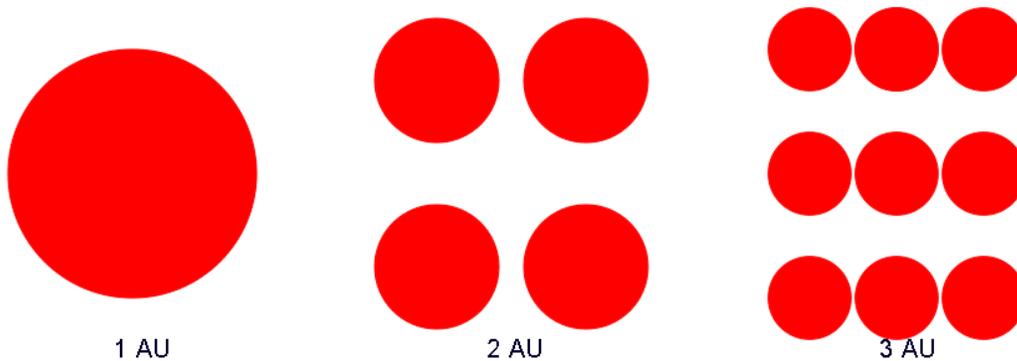
## **The area is also the inverse of the square of distance TOO.**

The length (radius, diameter, and perimeter) of the Sun is inversely proportional to the distance of the earth in any optical receiver (including our eyes) image. This will be true if the observer's optical receiver do not change focal length or magnification factor. If we use our bare eyes without proper protection to look at the sun we will get burns in our eyes. Assuming we have proper instrument or protection to compare the size of the sun at different distance. If the Sun is at 2 AU, the radius or diameter will be reduced by half (1/2) with the same optical instrument without changing the magnification. If the radius reduced by half, the area will be reduced by 4 times (1/4). If the sun is at 3 AU, the area or size of image will be reduced by 9 times.

## **Equal Size Equal Brightness**

Now we can concluded the brightness of the Sun is proportional to size of the image obtained with the same magnification factor in the optical receiver. The light intensity density will be constant. Therefore one Sun in 1 AU has equal brightness at 4 Suns in 2 AU and 9 Suns in 3 AU

and so on. If we add the size of the 9 Suns at 3 AU together will get the same size as one Sun at 1 AU.



Let  $D$ =distance in AU

$N$ =numbers of Suns for equal brightness at Distance  $D$  with One Sun at 1 AU:

$$N = D^2$$

Example, we will need 10000 stars at 100 AU for equivalent brightness of one Sun at 1 AU and also the total size of the 10000 stars at 100 AU in the optical receiver will be equal to the size of one Sun.

Everybody would have experience at looking at stars at night sky. The number of stars at night sky is **astronomically** huge. Base on the conclusion made earlier, the intensity of each star will be the same except the size are different in the optical receiver images. It will be very convincing that if we add up the image size at any image receiver of all the stars at night sky and compare with the size of one Sun at 1 AU distance, I would think the image of all stars at night sky will be much bigger than the size of the Sun at 1 AU.

However there is no actual figure of anybody did any estimation of this part of how big the size it will be when compare to the size of one Sun at 1 AU.

There are other problems too ...

Not every star emitting the same intensities of light, and not every star has the same actual physical size. There are a little dust factor especially within our milky way (our own galaxy). However dust factor should not be a huge factor as our telescope can peek through over 13 billion of light years in distance. Most astronomers agree our Universe is so huge that there should have enough light to bright up our light sky. The night light is only  $10^{-8}$  of day light in brightness. It would imply the total size of all equivalent stars of the night light is only  $10^{-8}$  of the Sun. Suppose you believe you add the size of all stars you see at night would be 1/100 of

the size of the Sun at day light, we should get  $10^{-2}$  brightness of day light at night. When  $10^{-8}$  compare to  $10^{-2}$ , it is still a huge difference. If you believe the total size of all stars at night sky is 10 times the size of one Sun at 1 AU, the night sky should actually be 10 times more brighter than day light. **Furthermore you would also expect to see other stars at day night 10 times brighter than the sun light alone.** Base on spherical attenuation, there are factors not known yet.

Base on this dark night sky phenomenon, I shall conclude:

**Quantum particles do not follow the rule of Spherical attenuation for travelling very far distance.**

The definition of “far distance” is always relative. It could be as far as light years in scale and also could be dependent of the frequency or size of the particle itself.

My quantum physic theory which also has effects due to probe wave not yet known to science which could be actually a major factor to create this paradox.

<http://echofromfuture.com/>