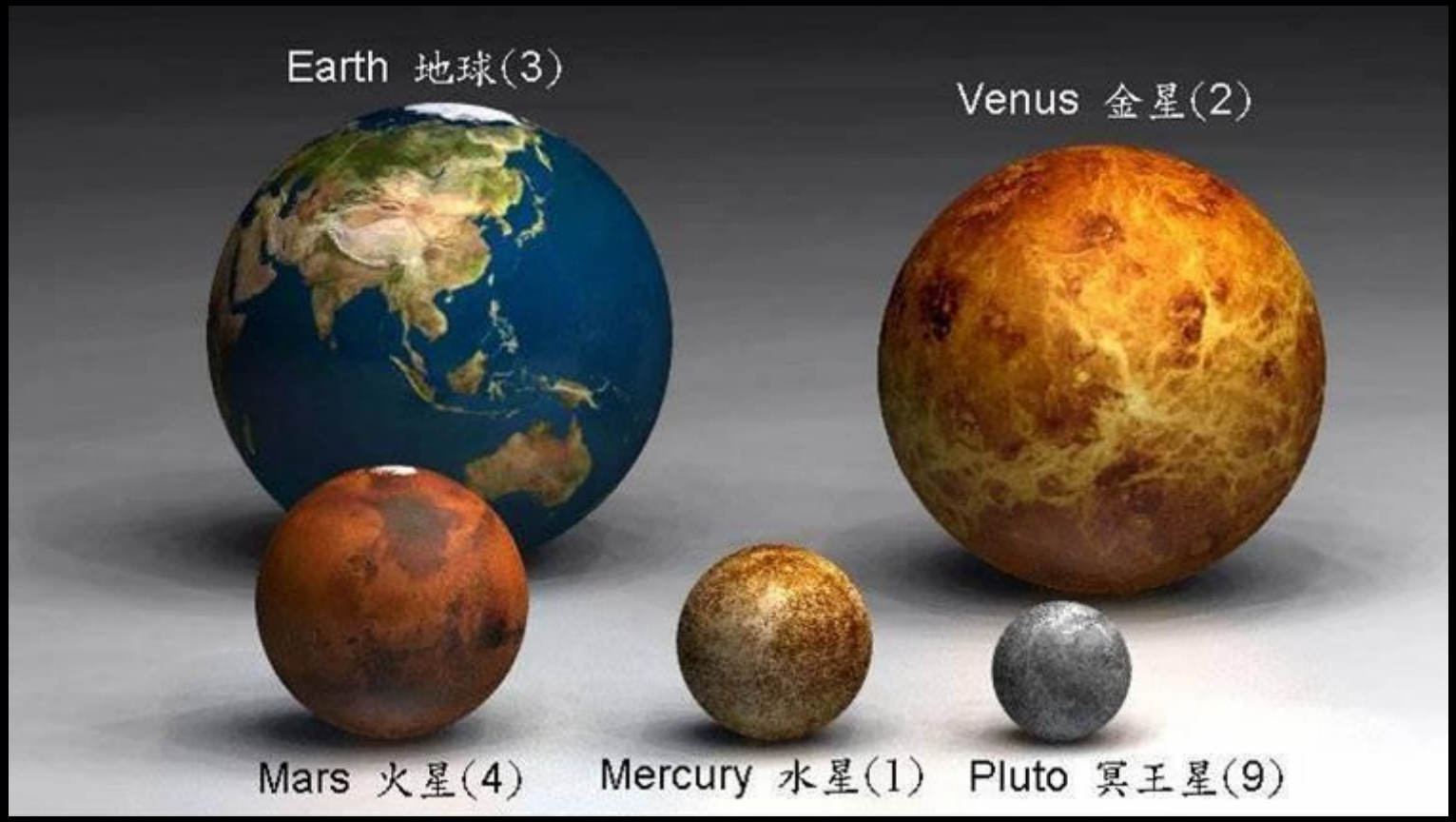
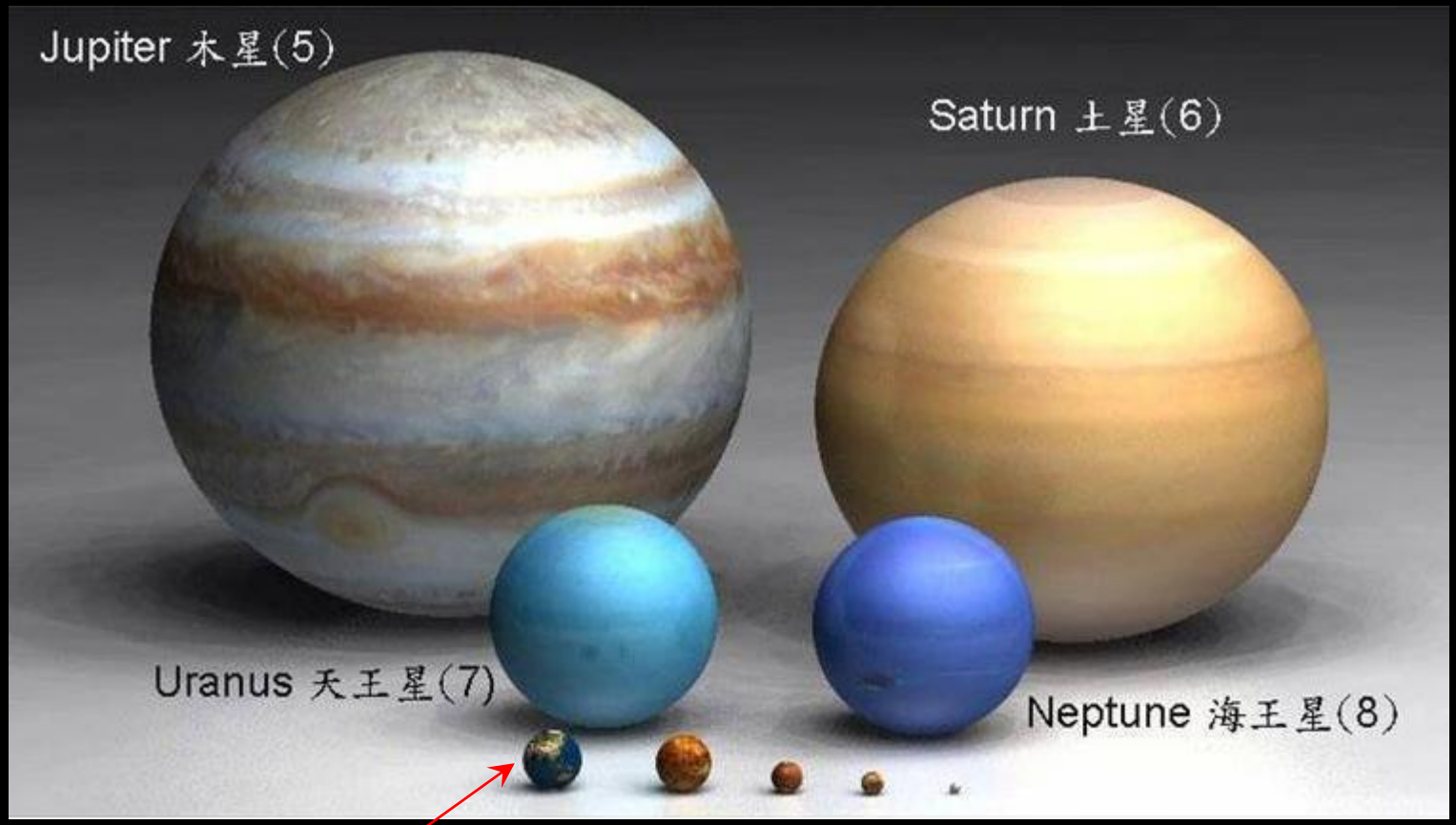
Compare the size of the earth with other planets

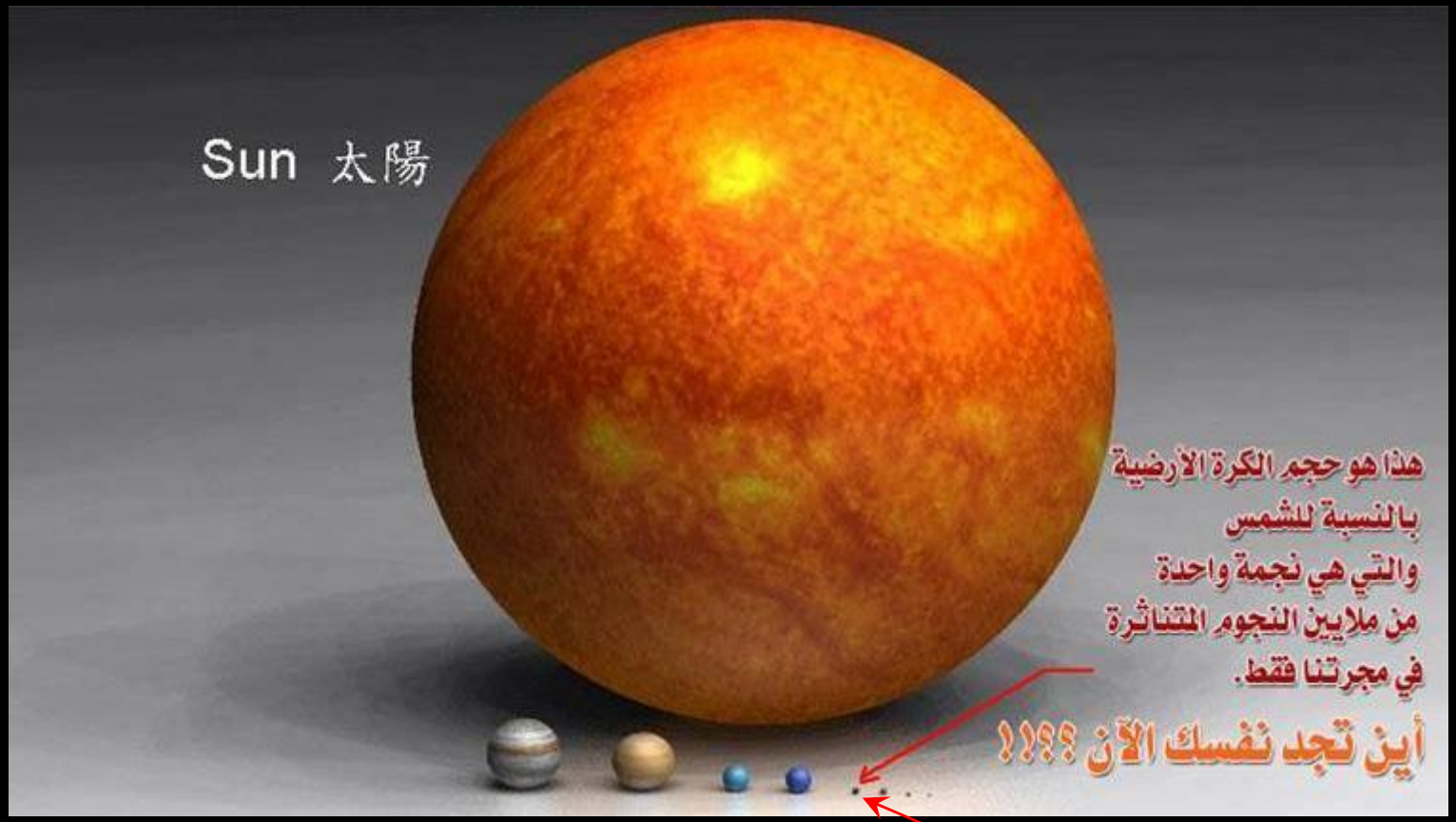


Now compare it with Uranus & Neptune



This is the Earth

Now Earth against Sun



Against Sun, Earth is like a dot
Think !! Where do you find yourself now??

This is the Earth

Suppose if we assume Sun as a 100 inch - for Demo

	Actual	Scale	Scale
	Diameter	Diameter	Diameter
Body	kilometers	inches	mm
Sun	**1391900**	**100**	
Mercury	4866		8.88
Venus	12106		22.092
Earth	12742		23.252
Mars	6760		12.336
Jupiter	139516		254.595
Saturn	116438		212.481
Uranus	46940		85.658
Neptune	45432		82.906
Pluto	3400		6.204

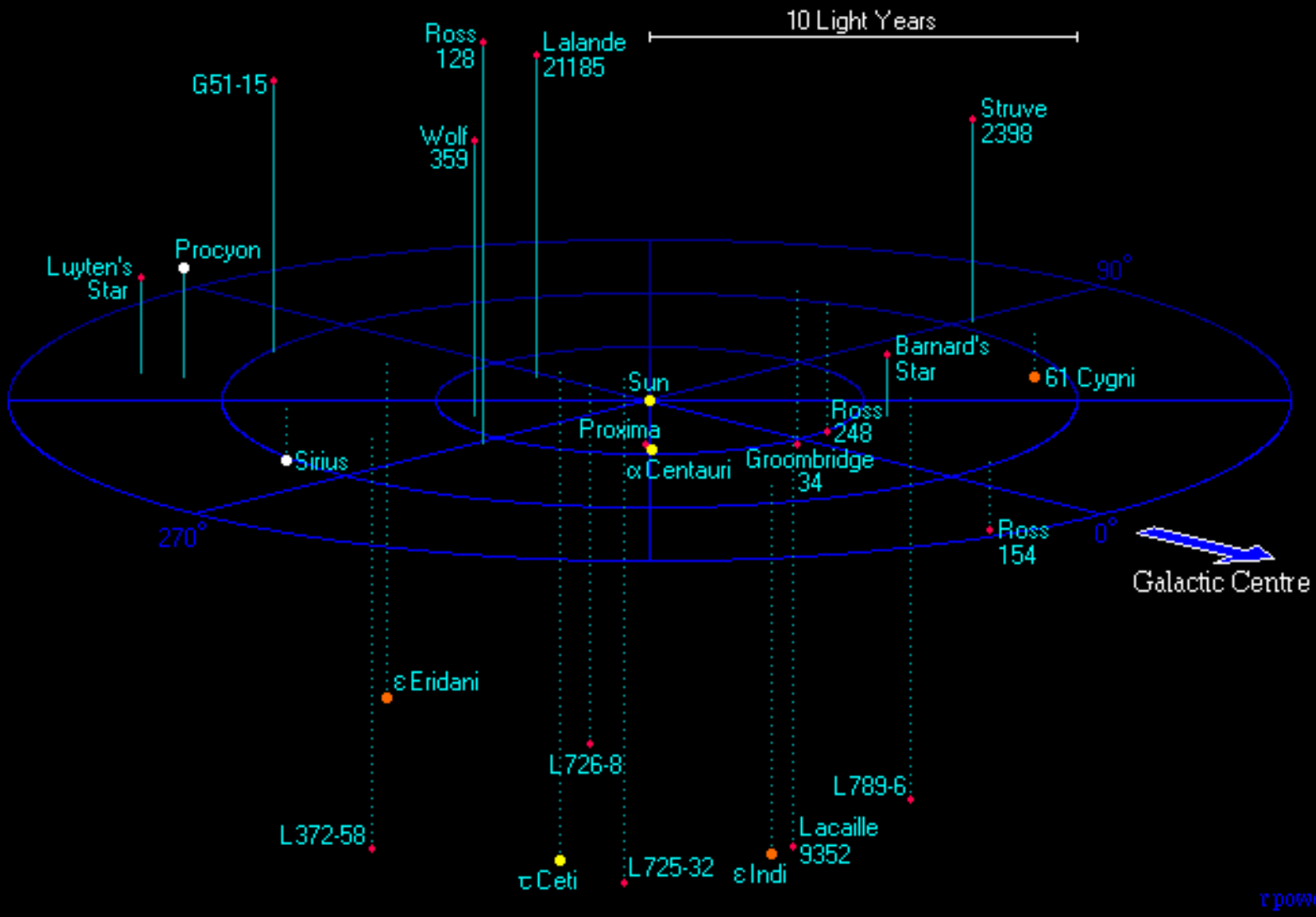
The Earth would be 23.253 mm

As we have compared the Earth with Sun

Now !!

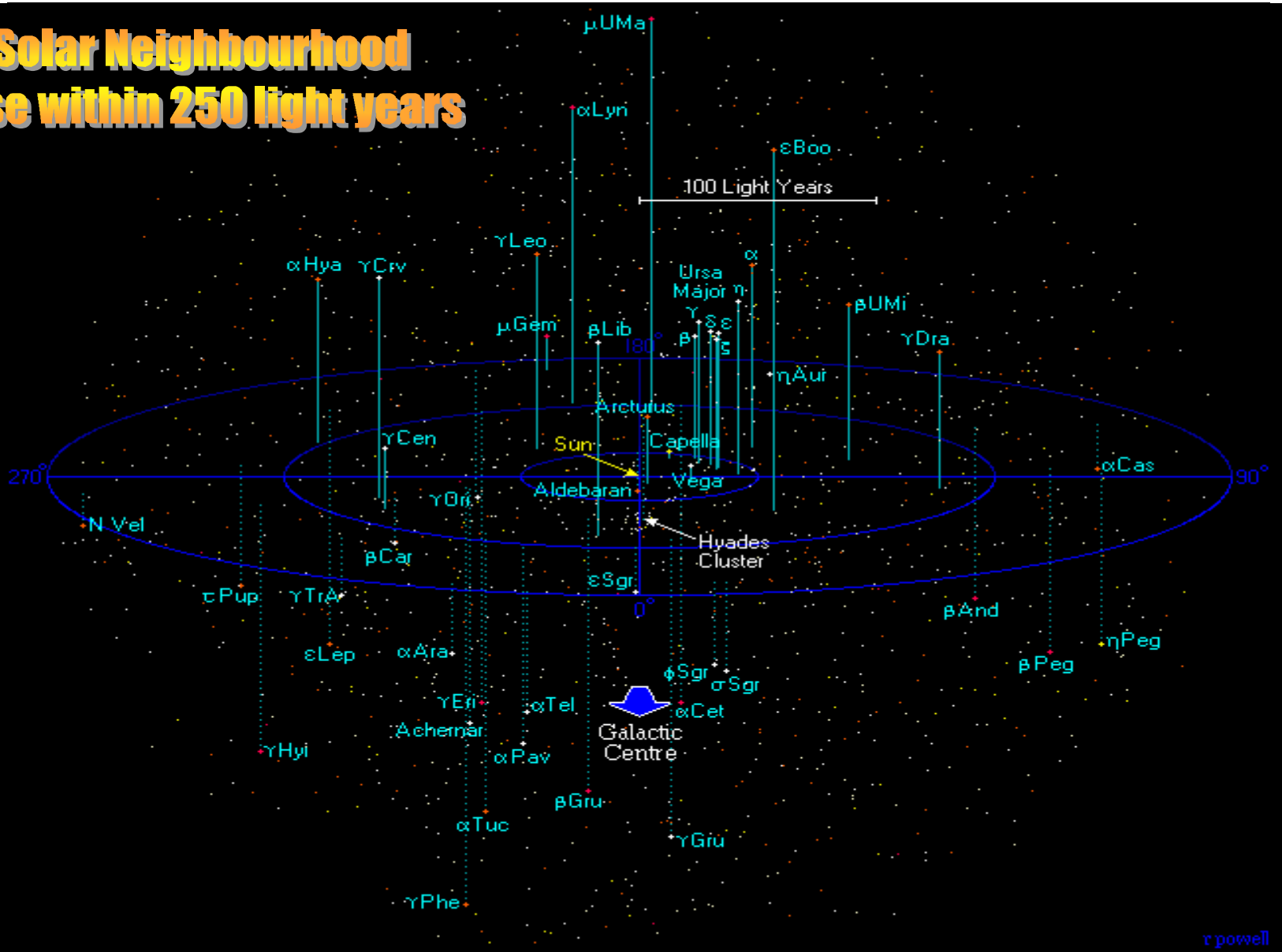
Start comparing the Sun with the Universe

The Nearest Stars from Sun

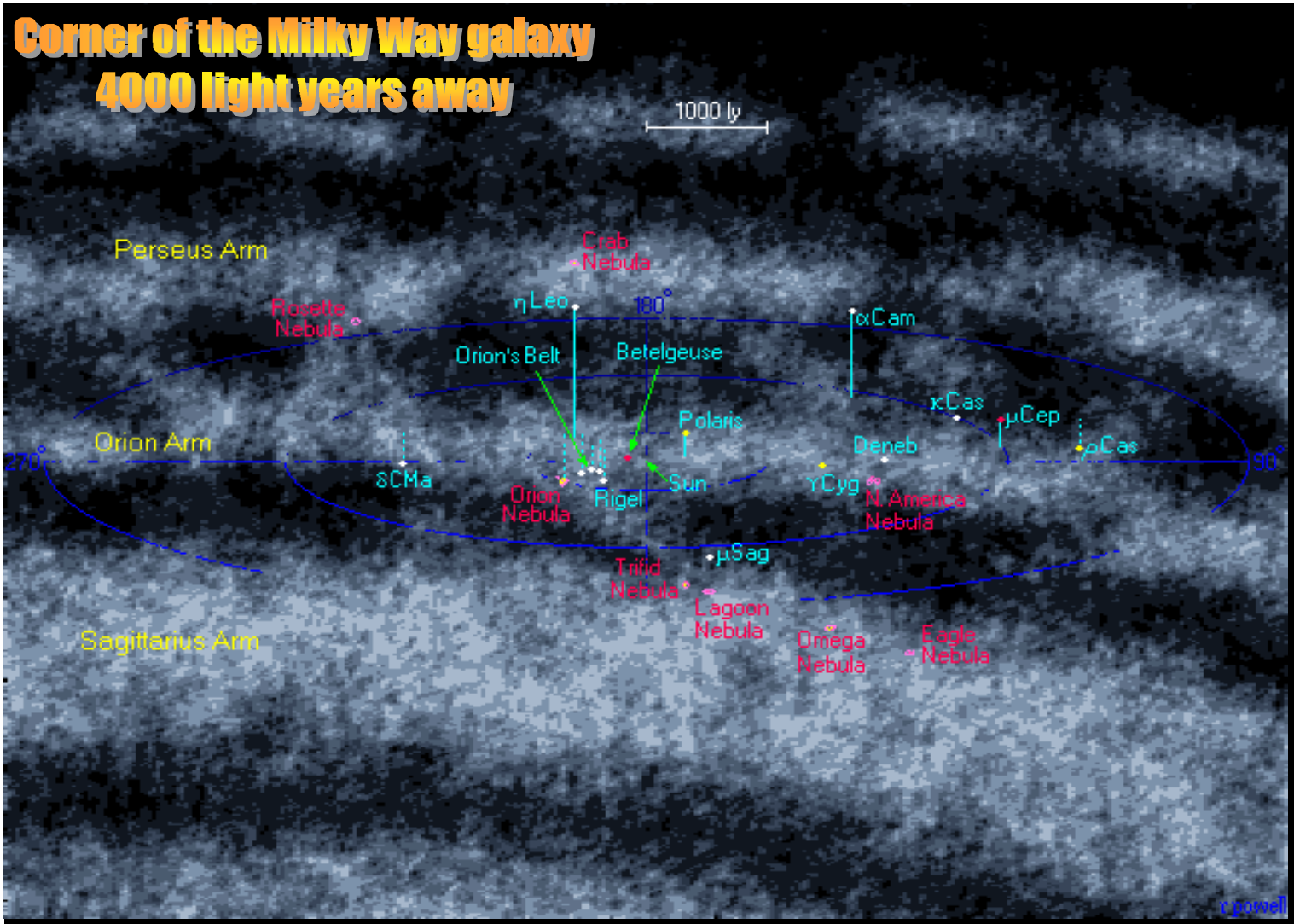


The closest star to the Sun is only 7000 times further than the edge of our solar system. This map shows all of the stellar systems that lie within 12.5 light years from us.

The Solar Neighbourhood
Universe within 250 light years

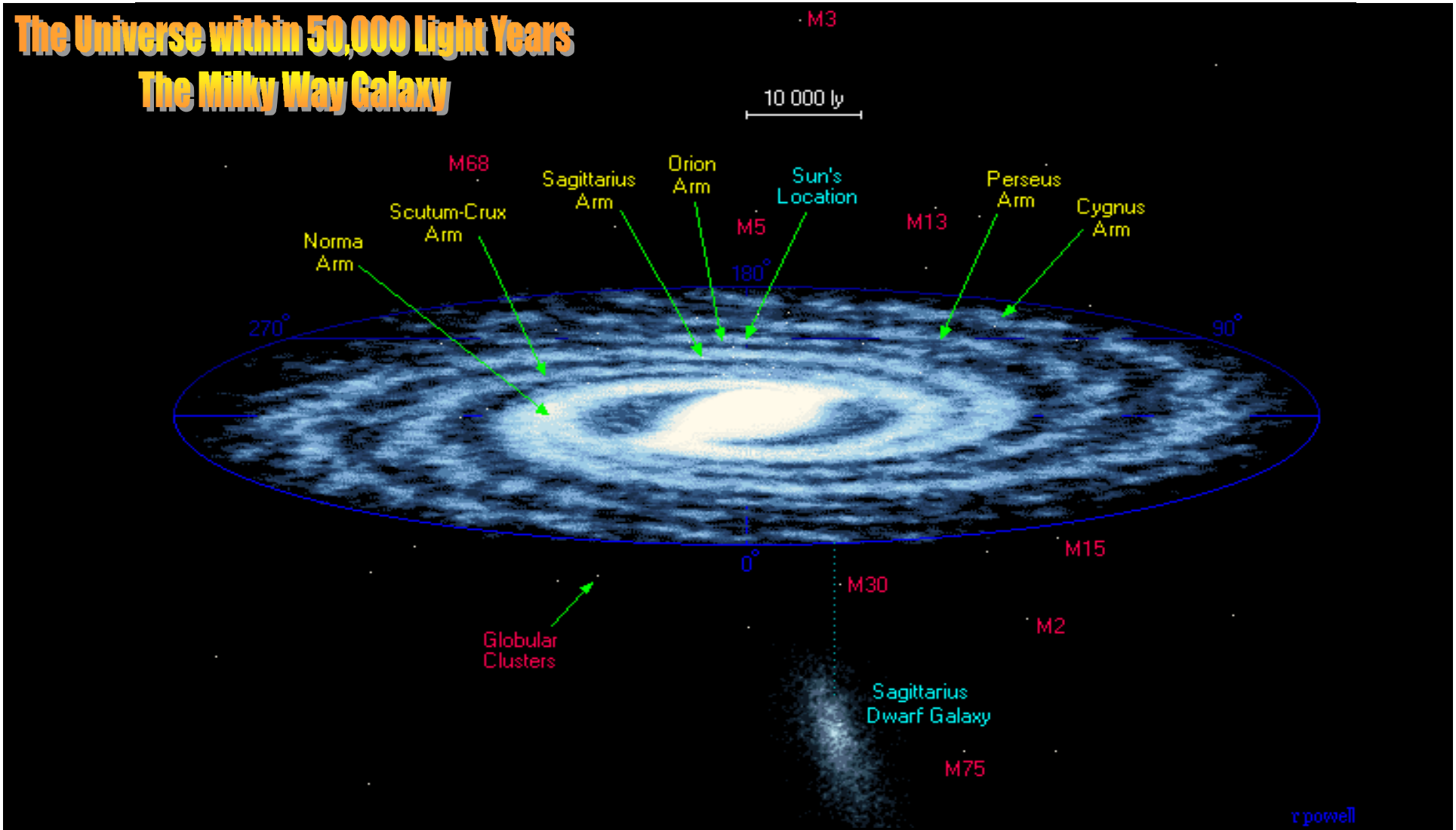


This map is a plot of the 1500 most luminous stars within 250 light years. All of these stars are much more luminous than the Sun and most of them can be seen with the naked eye. About one third of the stars visible with the naked eye lie within 250 light years, even though this is only a tiny part of our galaxy.



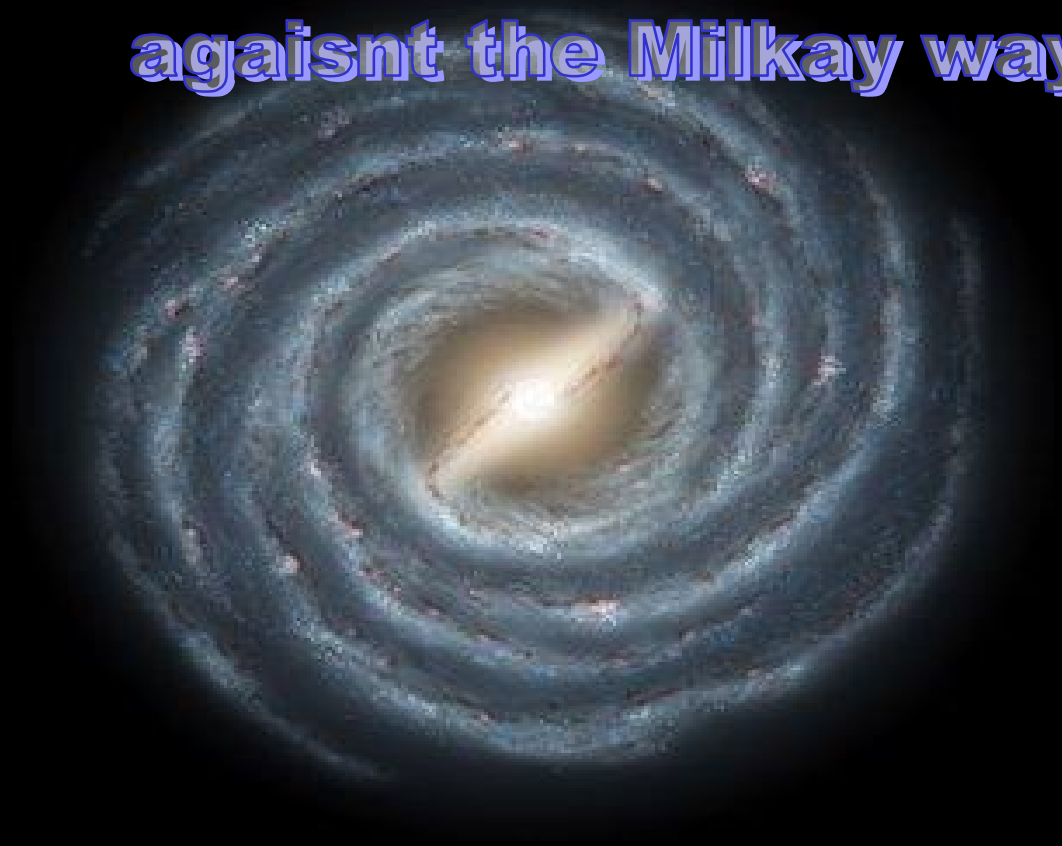
The Sun is located in the Orion Arm - a fairly minor arm compared with the Sagittarius Arm, which is located closer to the galactic centre.

The map shows several stars visible with the naked eye which are located deep within the Orion arm. The most notable group of stars here are main stars in the constellation of Orio -from which the spiral arm gets its name. All of these stars are bright giant and supergiant -stars, thousands of times more luminous than the Sun. The most luminous star on the ma -is Rho Cassiopeia - to us 4000 light years away, it is a dim naked eye star, but in reality -it is a huge supergiant star 100 000 times more luminous than our Sun.



A spiral galaxy of at least two hundred billion stars. Our Sun is buried deep within the Orion Arm about 26 000 light years from the centre. Towards the centre of the Galaxy the stars are packed together much closer than they are where we live. Notice also the presence of small globular clusters of stars which lie well outside the plane of the Galaxy, and notice too the presence of a nearby dwarf galaxy - the Sagittarius dwarf – which is slowly being swallowed up by our own galaxy.

Now!! Canyou find the Solar system agaisnt the Milkay way.

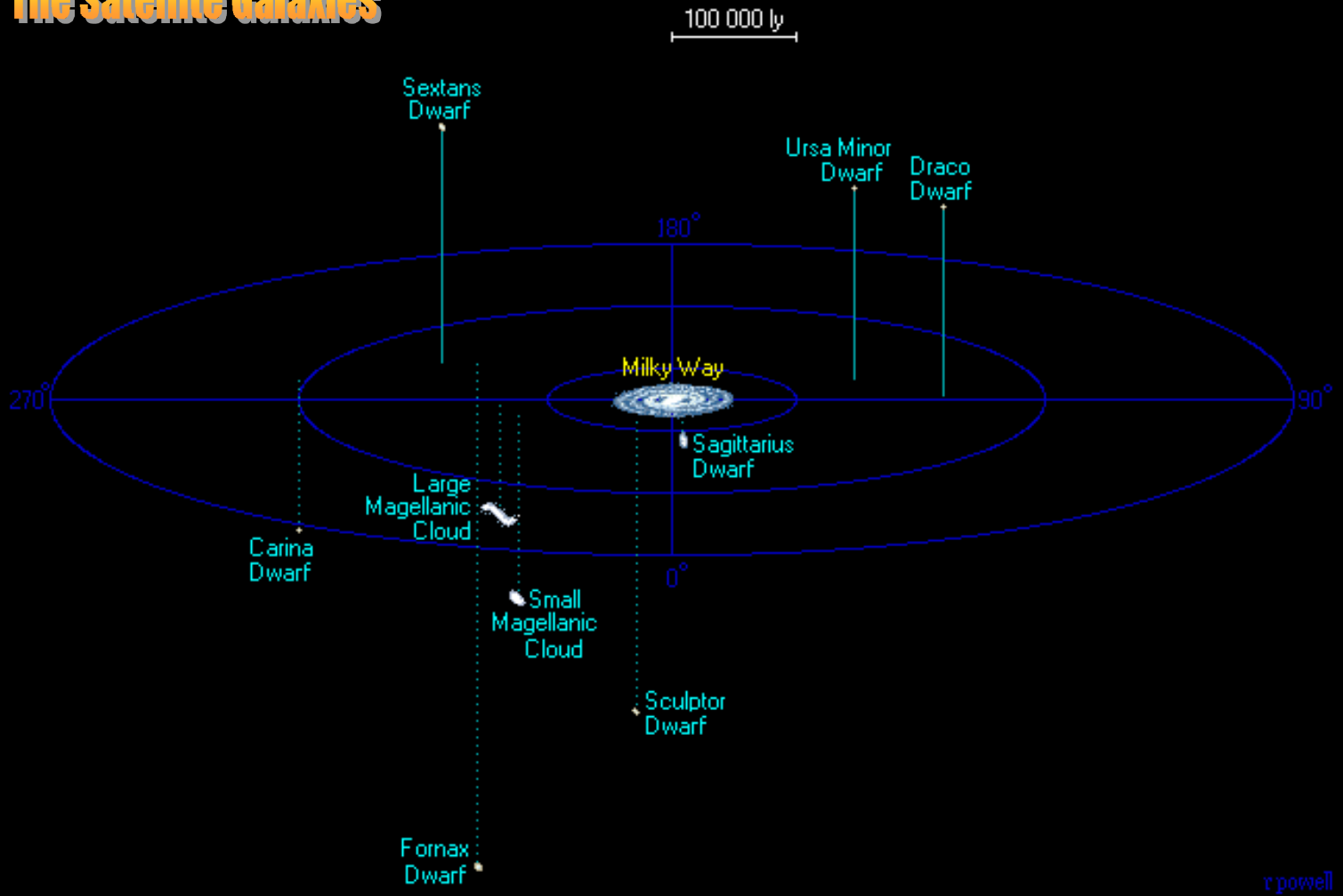


Although the Milky Way is but one of billions of galaxies in the universe,
the Galaxy has special significance to humanity as
it is the home of the solar system.

As a guide to the relative physical scale of the Milky Way,
if the galaxy were reduced to 130 km (80 mi) in diameter,
the solar system would be a mere 2 mm (0.08 in) in width.

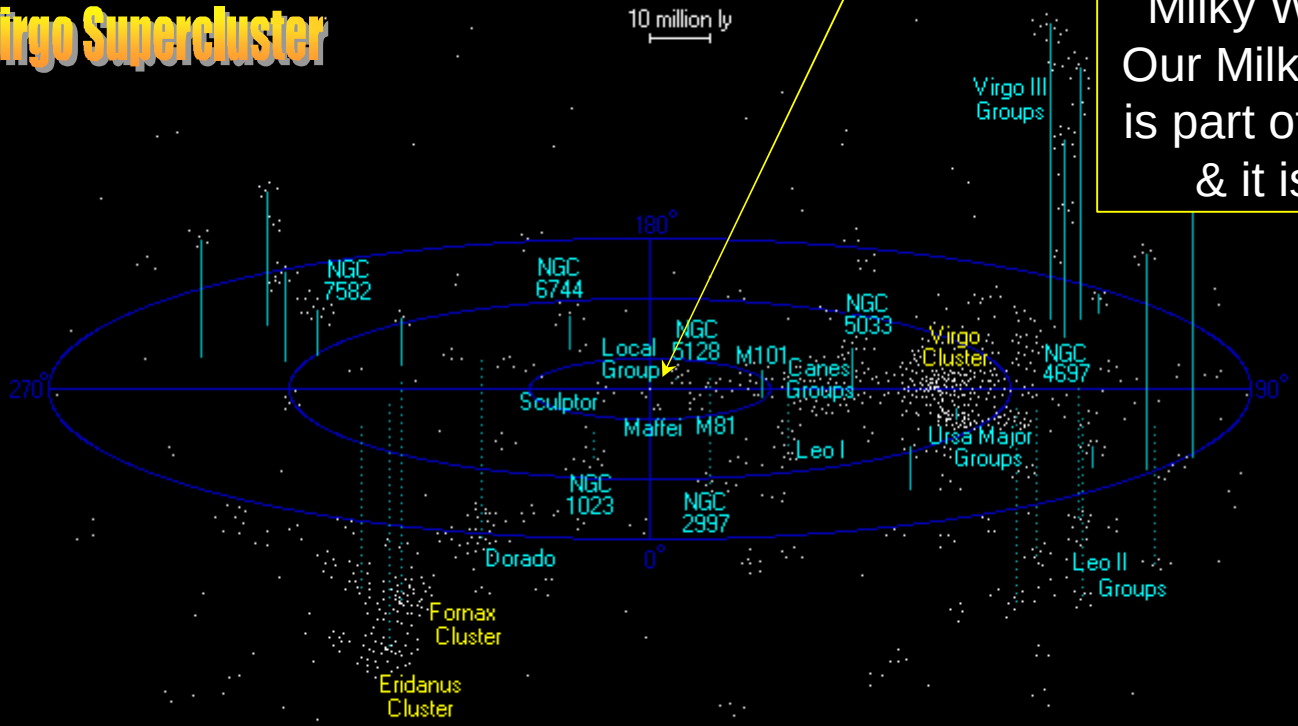
The Universe within 5,00,000 Light Years
The Satellite Galaxies

Number of large galaxies within 500 000 light years = 1
Number of dwarf galaxies within 500 000 light years = 9
Number of stars within 500 000 light years = 225 billion .



The Milky Way is surrounded by several dwarf galaxies, ypically containing a few tens of millions of stars, which is insignificant compared with the number of stars in the Milky Way itself. This map shows the closest dwarf galaxies, they are all gravitationally bound to the Milky Way requiring billions of years to orbit it.

The Universe within 100 million Light Years
The Virgo Supercluster



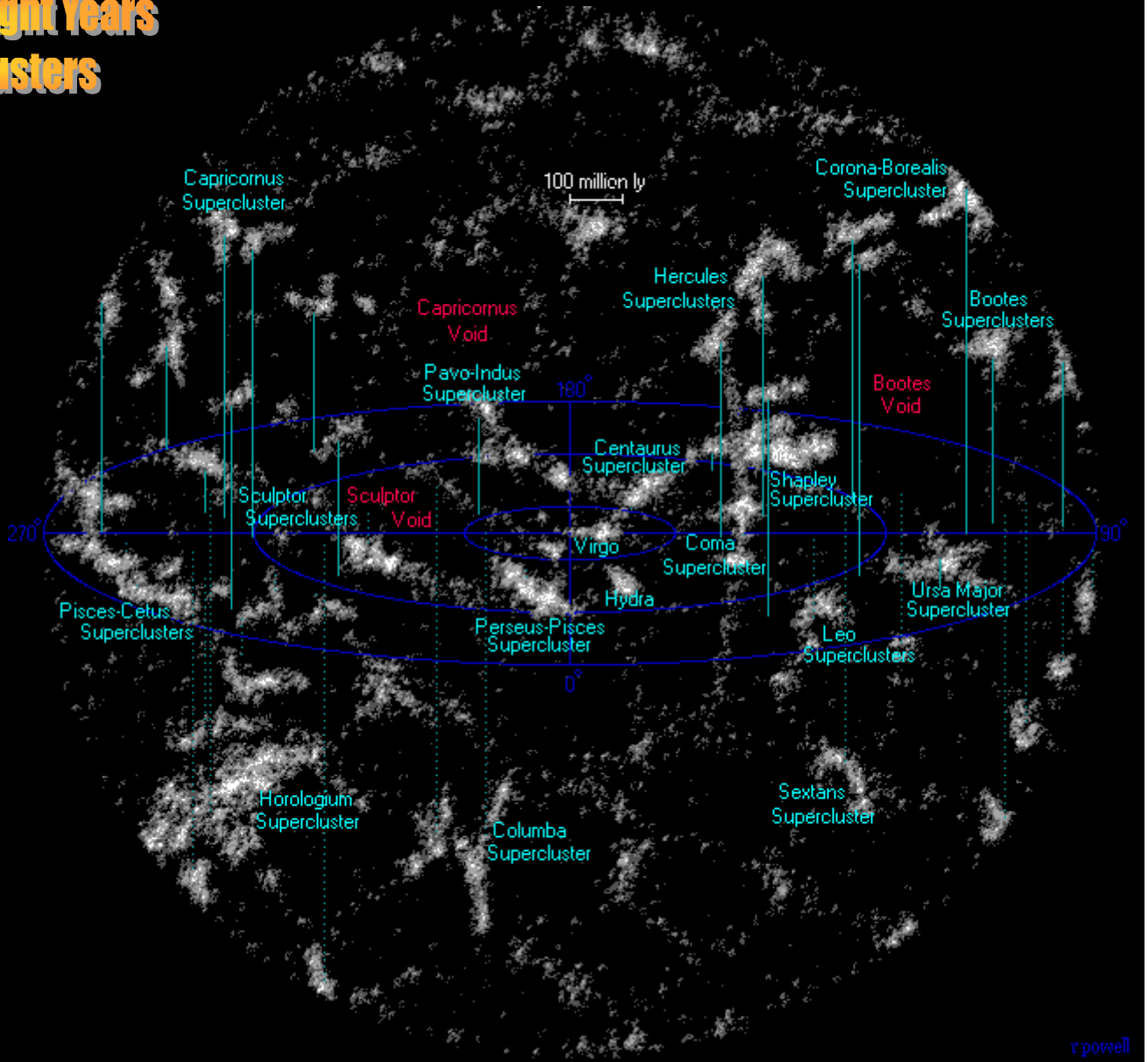
Can you find the Milky Way in this?? Our Milky Way galaxy is part of Local Group & it is in centre

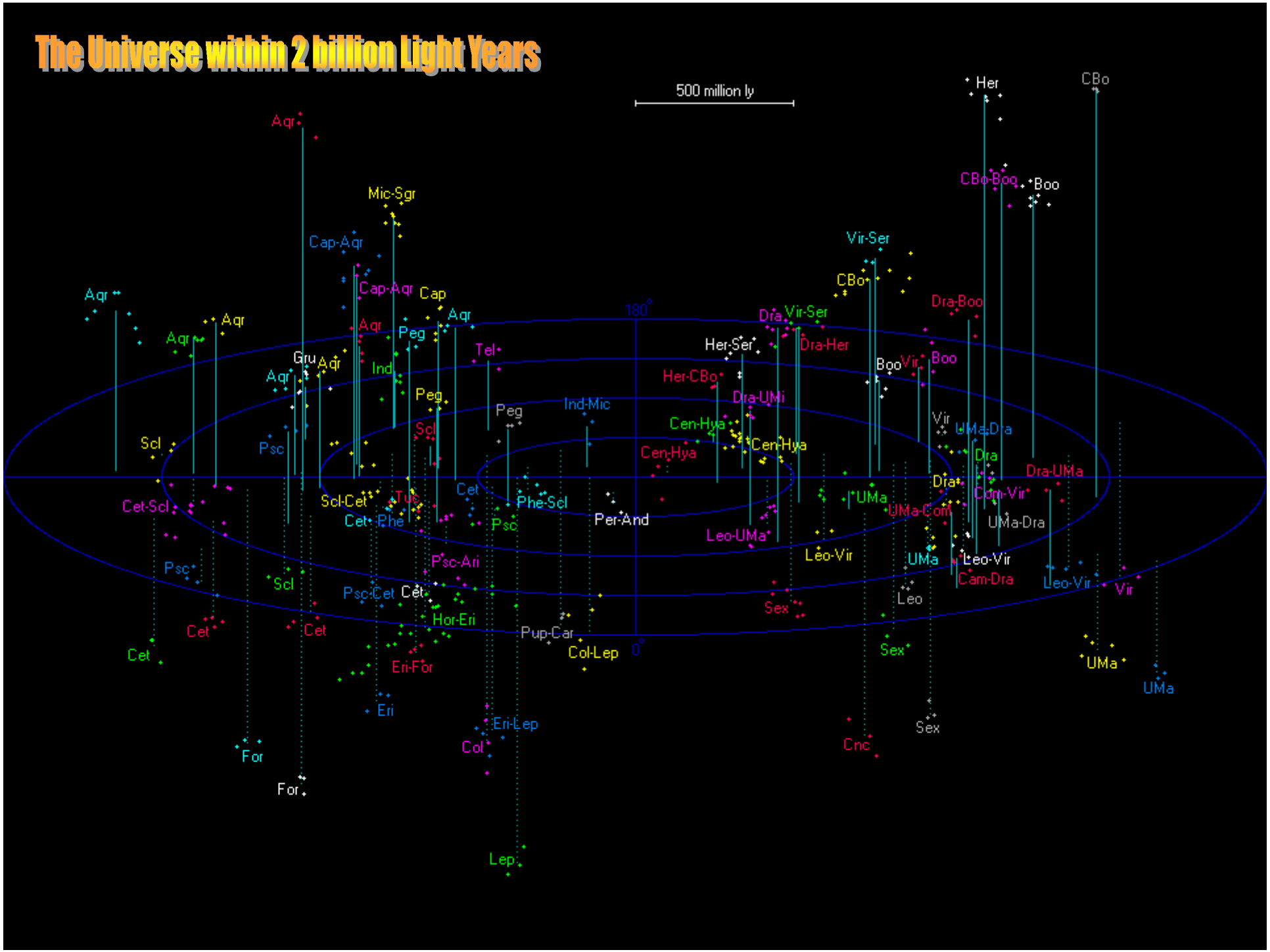
Number of galaxy groups within 100 million light years = 200
Number of large galaxies within 100 million light years = 2500
Number of dwarf galaxies within 100 million light years = 25 000

Our galaxy is just one of thousands that lie within 100 million light years. The above map shows how galaxies tend to cluster into groups, the largest nearby cluster is the Virgo cluster a concentration of several hundred galaxies which dominates the galaxy groups around it. Collectively, all of these groups of galaxies are known as the Virgo Supercluster The second richest cluster in this volume of space is the Fornax Cluster, but it is not nearly as rich as the Virgo cluster. Only bright galaxies are depicted on the map, our galaxy is the dot in the very centre.

The Universe within 1 billion Light Years
The Neighbouring Superclusters

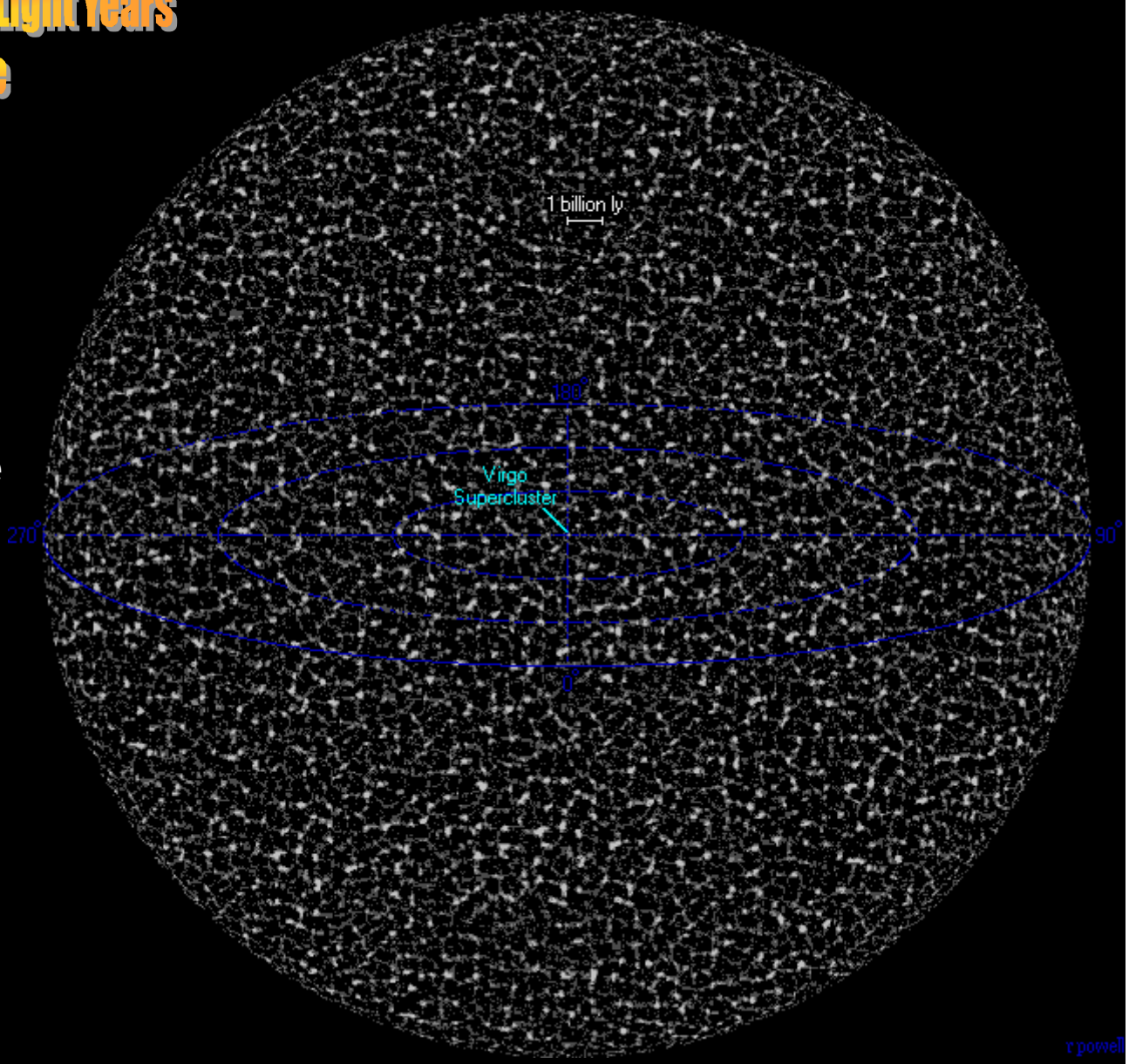
Galaxies and clusters of galaxies are not uniformly distributed in the Universe, instead they collect into vast clusters and sheets and walls of galaxies interspersed with large voids in which very few galaxies seem to exist. The map above shows many of these superclusters including the Virgo supercluster - the minor supercluster of which our galaxy is just a minor member. The entire map is approximately 7 percent of the diameter of the entire visible Universe.




The Universe within 2 billion Light Years
500 million ly
180°
0°
Aqr
Mic-Sgr
Cap-Aqr
Cap
Peg
Ind
Tel
Gru
Scl
Psc
Scl-Cet
Tuc
Cet
Phe
Phe-Scl
Ind-Mic
Per-And
Psc-Ari
Psc-Cet
Hor-Eri
Pup-Car
Col-Lep
Eri-For
Eri
Eri-Lep
Col
For
Lep
Her
CBo
CBo-Boo
Boo
Vir-Ser
Dra-Boo
Dra
Dra-Her
Her-Ser
Her-CBo
Dra-UMi
Cen-Hya
Vir
UMa-Dra
Dra-UMa
Com-Vir
UMa
UMa-Com
Leo-UMa
Leo-Vir
Cam-Dra
Sex
Leo
Cnc

The Universe within 14 billion Light Years
The Visible Universe

This map attempts to show the entire visible Universe. The galaxies in the universe tend to collect into vast sheets and superclusters of galaxies surrounding large voids giving the universe a cellular appearance. Because light in the universe only travels at a fixed speed, we see objects at the edge of the universe when it was very young up to 14 billion years ago.



Now Stop Comparing
& start thinking about the
Knowledge & Power
of the Creator by seeing this Creation

Don’t you ever ponder over the signs of the Creator ???

All Praise is to the Lord of the Universe
The Almighty, The all-Knowing, The Omnipotent

Can you imagine the Knowledge & Power
Of the creator of this universe???