

Thursday, April 26, 2018

From the infinitely small to the infinitely large.

Science: ASTRONOMY.

Stellar physics (Astrosismology - Helioseismology)

Luminary.

Natural celestial bodies.

The sun is a star in the same way as the planets of the solar system, the asteroids, and the Stars.

So, Ball of gas (hydrogen especially) massive, which, brought to high temperature, is the seat of nuclear reactions that provide energy (to make fast)

The matter and the invisible forces.

Atoms.

The photon (the light)

It is an electromagnetic wave.

Simply, it is a small particle that moves at 300,000,000 meters per second waving like a snake.

If we stop it in his race, it does not exist! It reacts like a bouncing ball, it has an energy to turn a propeller in a vacuum, but it's not matter.

**The light of the moon would take us 1.28 seconds
(speed of light 300 000 000 meters per second)**

If we could hear a sound from the moon it would take 18.87 minutes (340 meters per second) to be heard.

No sound in space.

The sound cannot propagate in the quasi-void interstellar.

The sound-wave therefore needs material to propagate, by a succession of compressions and expansions of the medium in which it is produced.

This medium can be solid as well as liquid or gaseous.

In the interstellar space, the density of matter is much too low..

In the order of one particle per cubic centimeter against some 1020 particles per cubic centimeter on the side of the Earth so that the sound can take support and spread.

More denser the body is, more it allows the sound to spread quickly.

So, in the air:

the speed of sound is about 340 meters per second or m/s

in the water:

it rises to around 1,500 m/s

in steel:

it reaches 5 km/s

Magnetism.

They are layers of air that rub against each other very high in the sky and create a potential difference between heaven and earth, the discharge is lightning.

You know this phenomenon also under another name is static electricity, you drag your feet on a carpet and then touch a doorknob and the discharge occurs.

Centrifugal force and centripetal force.

Gravity.

It is a force that makes the masses attract each other. Earth that has a large mass tends to prevent it from leaving its surface. Do you know celestial bodies that attract other celestial bodies? Tides are an effect of the moon that draws water.

It is the speed of the moon that makes it orbit the earth. It is also this force which explains why all the planets of good dimensions are round.

Atmospheric pressure.

Forces that we discover and apply.

There is energy use to new system that is meant to make our life easier. These energies have always existed but research and development give us the chance to use them.

Infrared
The ultra-violet
Microwaves
Nuclear magnetic resonance

The air.

The observation of the sky.

Solar systems.

**All solar systems are planets that revolve around a sun.
Ours is composed of 9 planets and 2 asteroid orbits.**

Kuiper belt and the one after Mars that revolve around a sun.

Each planet has different characteristics: its rotation, its size, its atmosphere, they are unique.

You will notice that the only planets we can observe are those of our solar system because,

First, it must be close enough to the sun to reflect its light to us.

Secondly, the more the object is far more light scatters, so a planet that does not shine, we can not see it in black.

So, the stars closest to us, after the sun, Alpha Centauri or Rigil Kentaurus or Rigil Kentarus, take 5 light years to reflect the light to us, so it is almost impossible to date, to see directly a planet outside our solar system.

Planets are stars in an orbit around a sun.

Satellites are stars orbiting a planet.

Comets are stars in elliptical orbit and composed of dust and ice.

The shape of its orbit means that when it approaches the sun and sees that it goes very fast, the ice melts and releases dust which burns and gives it this appearance.

Meteorites are stars composed of metals that have fallen on earth or on one of the other stars.

They are the result of stars or asteroids, which are not in orbit, or in a very crowded orbit.

Example, beyond Mars there is an asteroid belt and at a given moment, they are destabilized and start to be attracted by a star where they will crash.

The sun is a star in nuclear fusion where electrons, neutrons and atoms are evolving.

The sun is composed of 74% of its mass in hydrogen, which by nuclear reaction evolves towards helium at 24% of the total mass, so 2% of the total mass of the sun is other things.

The mass of the sun is 330,000 times that of the earth which is $5.97 \cdot 10^{24}$ kilograms.

Its temperature is 50,000 Celsius in altitude, but 16 million Celsius in its center.

This star of fury and nuclear chain reaction, is the basis of life on earth, without it there is no energy, no photosynthesis so no life.

The earth (planet) To cool down!

The earth is one of the 10 planets orbiting the sun ... It is distinguished by its temperature, its water and its atmosphere.

The earth that was not habitable because it was too hot and the solar

system was moving..

At the very beginning of its formation, the earth was hit, struck by many meteorites, comets, which allowed to acquire mass and water

To better concretize the geological time since the formation of the Earth (4,55 Ga), one can compare all this time to a period of 12 hours, which makes it possible to locate each event on a clock.

The moon is a natural satellite of the earth.

It revolves around us at 385 000km from the earth.

We think more and more, that a very long time ago, there was a collision between a small planet and the earth and it is thanks to this collision that the earth has increased its mass, thanks to the nucleus of the moon.

The land has become big enough with a good attraction to have an atmosphere and later life.

The debris of this collision gave the moon.

She feeds the imagination..

But is rather a simulation that tries to explain the different stages of the probable reality of its formation.

It is thought today that the moon formed very quickly, following a grazing impact of a Martian proto-moon with the earth in formation.

An asteroid differentiated by 0.1 land mass strikes the earth.

The iron core of the object penetrates the Earth's mantle.

A very large projection of silicate materials takes place towards space.

A fraction of these materials are captured in Earth orbit.....

An accretion disk (gravity action of the largest debris attracting the smaller ones) is formed and neighboring fragments agglomerate.

The accretion plays thoroughly and in a short time.

(it has been mentioned for only a few years) the largest piece has absorbed all the others: The moon, which will subsequently be bombarded by a multitude of projectiles from other sources than the fragments of the proto-moon that struck the earth.

To see the stars you will understand that it is a feat, because the easiest to see is our sun, but it is too bright to watch it directly.

The nearest star is 4.2 light years from us and if we count them up to 14 light years ago there are 50 stars ..

All the others are even further and are tiny white dots in the sky.



The moon and tiny venus [flic.kr/p/26s43AN](https://www.flic.kr/p/26s43AN)

This is Venus.

The shining point, visible in the morning or evening sky, can be confused with a star but Venus is a sparkling point relatively close to us. About 42 million kilometers as close as possible.

The Sun is 150 million kilometers from us.

Formerly, the ancients thought there were two stars .. A morning star.

Ephoros in Greek the bearer of the light of the dawn, or Lucifer for the Romans .. lux means light.. and an evening star.

Hesperos or Vesper.

But the Greeks demonstrated that it is the same brilliant object.

in this case a wandering star"(asteres planetes) a planet rather than a fixed star.

Venus is visible sometimes in the evening, sometimes in the morning.

The third brightest star after the Sun and Moon, it is easy to distinguish from the first minutes of dusk.

Note that the star of the Shepherd and the polar star designate two different stars, not to be confused.

The polar star, much less brilliant than Venus, has the particularity of appearing fixed in the sky and indicating the north.

It marks the North Celestial Pole.

The constellations are a set of stars in the sky (the celestial vault) that we connect together and that gives a drawing.

It is the Greeks who gave the majority of names to these constellations.

The other stars will be named by a letter and a number like m82 in the constellation Big Bear (M82 is a galaxy)

Galaxies are a cluster of stars and gases that revolve around a central point.

They are said to be light years away from us.

(a light year is the distance that light makes during a year, remember that the light is 300 000 000 meters/second)

There are about 100 to 300 billion stars in our galaxy and in the universe about 100 billion galaxies.

Our Galaxy is called the Milky Way.

It is 100,000 light years in diameter.

We turn around this central core in 250 million year and we travel at 240 km/s in waveform and we cross the milky way disk every 30 million years.

That's when life is in great danger.

The Universe is all there is, it is very simple it is the infinite if it answers our laws and rules.

If we are talking about parallel universes where time does not flow as here, well it's another universe with which we have no contact, so we can not say if it exists, it's not in our universe.

A satellite looks like a shooting star but we see it much longer.

As he turns around the earth, it re-appears after x time.

Often, there are several on the same orbit.

A shooting star is a piece of rock falling on the ground it's a meteorite.

It is very bright and it is visible a very short moment.

An aurora borealis it is towards the North that it is visible.

it's dust falling on the ground, it's a luminous cloud.

A UFO.

Never observed, so far!

Details of the DU

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Posted by **Veronica IN DREAM** at **6:36 PM**