Observation of the Universe through questions

Slavko Sedić (Weitter Ducks) wduckss@gmail.com

What are the lakes on Titan made of?

Due to its thick atmosphere, Titan is constantly an object of interest. Details about its origin, composition, the reasons for such a thick atmosphere to exist, why is it – like Earth – primarily (98%) composed of nitrogen, is it suitable for life, what would the possible life forms look like, etc., are sought to be found by all possible means.

Articles about the existence of methane oceans on Titan (the satellite of Saturn) have been published these days on almost all portals related to cosmology after a radar research (http://phys.org/news/2016-04-cassini-explores-methane-sea-titan.html or, "..has A sea of pure methane. ... The moon has three large seas, all located in the northern polar region, that are surrounded by small lakes. So far, just one large lake has been found in Titan's southern hemisphere. "http://www.space.com/32741-one-of-titans-strange-seas-is-nearly-pure-methane.html, etc).

This is, however, hardly a news, as this is just a confirmation of earlier knowledge that there are oceans of hydrocarbons on Titan ("The possibility of hydrocarbon seas on Titan was first suggested based on *Voyager 1* and 2") https://en.wikipedia.org/wiki/Titan_(moon)#Liquids). Even missions with research probes were sent to the surface of this satellite (*Cassini-Huygens*).

Problems occur when we have a look at the database of Titan: the average temeperature on Titan is -179,5°C, with nitrogen consisting 98% of atmosphere. Basins of liquid were discovered in the northern and southern polar areas, which are much colder than average, according to the general principles of temperature arrangement on an object, due to the different influence of tidal forces on the equator and the poles of an object.

Methane changes into solid state of matter at the temperature of -182,5°C and ethane at the temperature of -182,8°C.

Liquid state of matter for nitrogen ranges from -210°C to -195,795°C.

The difference of only 3°C between the average temperature of Titan (-179,5°C) and the melting point of methane (-182,5°C) definitely eliminates the possibility of methane and ethane to be in the liquid state of matter in the polar areas of Titan. They can be there only in the solid state of matter, because the temperature in the polar area needs to be at least 20°C lower than the average temperature.

Only nitrogen can be found in the liquid state of matter inside the polar caps (its melting point ranges from -210°C to -195,795°C) and – beyond any doubt – this is pointed out by the atmosphere composition, which is 98% composed of nitrogen.

The existence of basins in the equatorial areas would be able to support the idea of liquid hydrocarbons, the indication of which is the atmosphere composition, but, it would rather be like nitrogen on Pluto, which is on the edge of melting and hardening. The evidence are firm solid parts of surface that move on the mildly melted nitrogen. These data are of the Titan atmosphere composition (Stratosphere: 98.4% nitrogen (N_2) , 1.4% methane (CH_4) , 0.2% hydrogen (H_2) ; Lower troposphere: 95.0% N_2 , 4.9% CH_4 https://en.wikipedia.org/wiki/Titan (moon)) and they suggest such possibility.

The deficiency of methane (CH₄) in the atmosphere is caused by the temperatures lower than -182,5°C, which eliminate methane from the atmosphere and sediment it on the surface, while nitrogen remains the dominant element of the atmosphere.

This has a certificate in a new measurement of the stratosphere at the south pole of Titan, which is 40° less than average temperatures.

("Titan's hemispheres have responded in different ways to these seasonal changes. The wintry effects have led to a temperature drop of 72 degrees Fahrenheit (40 degrees Celsius) in the southern polar stratosphere over the last four years." http://phys.org/news/2016-10-cassini-seasonal-titan.html) The subsequent added, author.

Why telescopes lie?

Even though I was certain we had grasped the modern technology of our telescopes, it seems not to be the case.

By observing the celestial objects the astronomers found out that a red spectral shift increases with the distance, i.e., the objects increase the distance from us faster and faster. Even Mr. Hubble stated that the universe expands in accordance to his constant, which has been, as time passes, continuously increasing. The object like Andromeda, which is relatively close to us, moves 330 km/sec. faster than us, according to the measurements from the end of the last millennium, or 2 000 km/sec., according to the measurements from this millennium. Both measurements were conducted by the same institution. With the distance, the speed is also increasing, therefore the most distant objects – more than 13 billion of light-years away – increase their distance by the speed of 270 000 km/sec., almost the speed of light (9/10). The universe is, therefore, expanding faster and faster.

Here, some problems occur. These the most distant objects that move almost at the speed of light are not in the present time, but these are the objects that were there more than 13 billion of light-years ago! it should actually mean that these objects were moving at that huge speed 13 billion of years ago and that the objects from the recent past move only $300 - 2\ 000\ \text{km/sec}$. faster than us. It is obvious that the spectroscopy on these telescopes lies when it claims that celestial objects were moving much faster earlier in the past and that now, in comparison, they almost don't move. The reason for

it is the Hubble constant, which does not refer to the past, but to the present and future time.

Maybe the scientists realized that a malfunction occurred, so they just compensated for the errors – just like in "Star Trek" series – but they did not have time to print the new results!

I am more inclined to trust the telescopes and spectrography, after all, because they state facts. These facts don't fit into the scientific theories, which are, besides, only the constructs of mind. To set things right, we must go back to the time of Isaac Newton, the time when there was not so many far-fetched theories.

A rotating object has its movement direction (planets, stars) and that direction is inside the next bigger rotating object (galaxy), which also has a movement direction inside the universe, as a result of rotation... The rotation of universe satisfies the results of the observations: the objects closer to us move slower than the more distant objects, with the most distant objects being the fastest. That is a reflection of the relations inside galaxies – nothing new about it. The telescopes are not designed to foretell the past but to estimate the distance and speed of the celestial objects.

It goes similar with the devices for measuring background radiation, which estimate the distance from the source to the device, i.e. Earth.

Let's assume it originates from the Big Bang. If a background radiation from 13 billion of years ago travels at the speed of light, while matter at its best travels 10% slower, with taking the same starting place into account – how is it possible for them to meet now? What is the calculation that explains it?

Background radiation arrives from the distance of 13.7 billion of light-years. These data are the same as the distance of the most distant space objects that have been observed. Background radiation arrives from the end of the Universe.

Where is that singularity?

Singularity is a place where it all came from, the place where the laws of physics are not observed and the place that is not too far, but also not so close.

It is not here without a good reason – on the contrary, it serves to fulfil a large gap that could not be explained by the Big Bang theory, and besides, it fitted in it very well.

If we were to have a telescope powerful enough, or some other measurement device, we would have been able to see the very beginning of all, the universe hatching out of its shell and developing nicely because of the inflation force and, some 13 billion of years we would have what we have now.

Besides those telescopes on the surface of Earth, there are the following devices: telescopes Hubble and Spitzer, satellites COBE, WMAP, Planck, etc. But, no matter how modern, powerful, good they are, with ever improving options of gathering data, we still have not gone farther than "400 000 years" after the so-called Big Bang. It is obvious that we will not improve already achieved results or get closer to the singularity, no matter how much we invest in new devices and technologies. What is wrong, where is the mistake?

By looking into the space, we get the results, expressed in the measurement units of length and we don't establish history. How is it then possible that, when we register the waves approaching from the distance of 13.7 billion of light-years, we create history based on that fact, except for knowing the distance and that the objects that emit radiation were there that much time ago, which points us to the deduction of the universe's age? Now we can see on that distance and to see even further, we need to change (frequently changing) opinion of the universe as an isolated unit, as well as that of the length being a distance from the observation point to the observed object. That means that on that distance exist the objects which emit radiation needed for the same to be observed.

If there were a singularity, where would it be, to the south, north, east, west, above our heads or, to the opposite, beneath our feet? Earth is a conditional sphere; how is then possible to see one and the only point, named singularity, from all of its surface points? What, in that case, represent other points that are sideways beneath or above it, or opposite to it – what is there? Our devices can't see that because we still can't bend the direction of observation in that way that we can observe forwards and backwards at the same time. They see the universe as it is. The results we have are the presentation of the universe in real measurement units of length, i.e., 13.7 billion of light-years is a distance from the observation point to the observed object.

That object emits radiation all this time and, according to photographs and insight into the universe, it can be concluded that it will continue emitting for the next 13 billion of light-years, just as it had already been emitting before, for as much time as has already passed.

Gravity and anti-gravity

The forbidden article:

At the beginning of April 2014., this article was removed two times, after having been proclaimed a plagiarism ("Все о космосе и НЛО"), even though it had appeared in 2008., two years before the article that was "plagiarized", which appeared in 2010.

A quote of a part of the text from the year of 2008 (http://www.svemir-ipaksevrti.com/U%20potrazi%20za%20izgubljenim%20svemirom.html#7e): ,.... Celestial objects rotate around their axes; the rotation creates waves, which travel away

from an object and in that way create repulsion forces, which prevent the objects, captured in the orbits around them, from falling onto them. Electromagnetic forces constantly direct smaller objects towards the greater, dominant object, which, due to its rotation, constantly repulses and deflects the incoming object until it gets captured in the orbit of the dominant object. That is why objects oscillate on their trajectories; electromagnetic forces of repulsion and attraction simultaneously affect them... "

A quote from the year of 2004 (*Theory of Zadar http://www.svemir-ipaksevrti.com/Theory-of-Zadar.html*): "Gaseous systems inside galaxies can be started off by rotation and in the center they create whirls, the objects which are tens of thousands light-years of size. They are the greatest space objects, due to its specific origin and structure.

Supported from within, the rotation of these objects, besides the electromagnetic forces that are proportional to the size of an object, also creates strong repulsion waves, which are proportional to the speed of rotation. "

If academics have been trying to claim the supremacy over this article, then it must be good and valuable text worth reading.

The author of the article: W. Duckss (S. Sedić)

Why the objects don't simply fall on its central object (a star, a planet, the centre of a galaxy), just as it occurs on the planetary satellites, as well as on Venus and Mercury?

The laws of physics are clear: the bigger the object, the stronger are the EM forces of attraction. Nevertheless, something is wrong when we know that some objects linger in the orbits around the other objects.

It is logical to conclude that the rotation of a central object (an object around which other objects rotate) is here under observation. The rotating objects seize other smaller objects, whereas the objects without a rotation don't have satellites. Due to the rotation, an object emits synchronous radiation, by which it pushes away the objects in the direction of the rotation. The EM forces that usually have an attraction effect now obtain a repulsion effect, i.e., they push away the objects and prevent them from falling onto a central object.

If a rotation did not existed (which is impossible, due to the atom structure and its bipolarity), there would have existed only straight trajectories from the smaller objects towards the bigger ones, until they explode and *vice versa*. The whole universe rotates constantly: the stars rotate, as well as the planets that are beyond the reach of the strong EM forces, the galaxies rotate, the universe rotates ... The objects' trajectories are circular, or elliptical, to be more precise. All objects observe that law, even comets and asteroids that visually travel early, firmly observe that law.

Central objects in the centres of the galaxies observe more complex laws that are not based on the physical black holes. Beginning from the stars the size of our Sun, even the

low speed rotations cause polar cyclones, which will in time turn into whirlwinds of the galactic size (up to 30 000 light-years). They are able to hold together such a massive objects; the rotation of matter around a whirlwind holds the whole galaxy together.

Astrophysics clearly shows that here we don't deal with black holes. "Black holes" are by their volume small objects (it has been suggested that the biggest of them are no bigger than a planet). If they were to gather other objects, these should be smaller in volume than the central object. Considering the fact that a black hole is sucking in, the area around it should be clear from its upper and lower side, i.e., there would be no matter at all, and it is not the case.

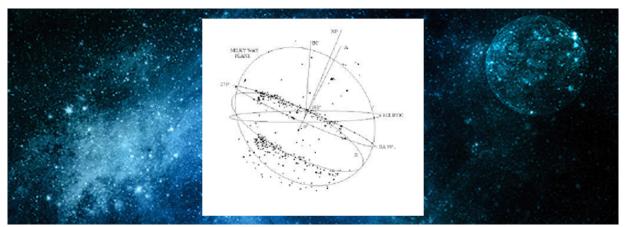
Whirlwinds have some black hole characteristics, too; they suck in matter at both ends and manage it along the spiral. The appearance of a galaxy proportionally corresponds to the size of a central object. The stars and planets are managed in the equatorial area, just as it is the case with some other objects. Furthermore, attraction and repulsion forces are now balanced (a big object = strong gravity = many objects seized in the orbits around a central object in the equatorial area).

Now we no longer need sheets or other requisites to understand why are the orbits around a central object stable and very long-lasting. When an object increases in size faster than the existing proportion of relations allows, it slowly distances itself and finally becomes independent, if there is luck (our Moon is slowly distancing itself from Earth; Large and Small Magellanic Clouds are distancing from Milky Way,...).

Where did the blue spectral shift inside the universecome from?

The universe expands at the approximate speed of radiation (270 000 km/sec.) and, according to the Doppler effect, all objects in the universe should have a red spectral shift, but it is not the case. It seems that certain objects (galaxies) do not observe the laws of physics and move to the opposite direction from the forces, caused by the explosion of a mini-bubble (which also fails to observe the same laws).

It would, nevertheless, all fit in just fine, if only these events were equally represented in the volume of the universe, but they are not. These events are related only to our "close" neighbours, and those objects that are further away, all the way to the distance of 13.7 billion of light-years, they have a red spectral shift and are distancing from us. I just can't believe how they didn't come up with an idea of placing some black hole in our vicinity, to make it responsible for this "mischief" and tell us horrible stories about it swallowing us all at the end.



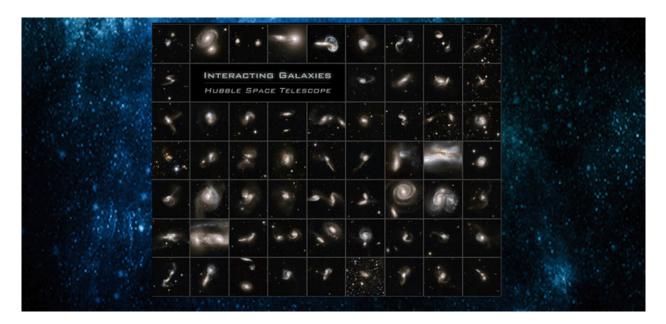
It is interesting that there is quite a number of galaxies that have a blue spectral shift; the data say of no less than 100 and as much as 7 000 of them. They seem to be orderly placed and not randomly scattered around, which can be seen on the enclosed map. When another galaxies move towards our galaxy, there are two outcomes:

the movement takes place on the same direction (on the same part of the curve),
the movement takes place on some other direction.

In the first scenario, the outcome is a collision and in the other one, a bypass of the objects. For the objects on the same direction to have significantly different speeds, there should be some reasons for it, and here they are not. If one of them would be size, then the dwarf galaxies (Andromeda and Milky Way) that exist between the two would collide sooner, but they either move away or have a *status quo*. The objects moving on the same direction have a mild red spectral shift because of the circular trajectory. The objects moving on the curve show that the objects are moving away sideways one from another, even though they have the same speed, as if they would not have the same movement direction.

Bypass is a realistic option because the movement directions of these galaxies have different speeds. The speed increases when the objects further from the centre of the universe are been observed (the speeds in the centre of the universe range from 200 to 300 km/sec. and less, and the most distant objects have the speed of 270 000 km/sec.). Andromeda has a negative speed (it is moving towards us), ranged from -300 to -2 000 km/sec., depending on the different measurement results that have been presented: M90: -383 km/sec.; M86: -340 km/sec.; M98: -142 km/sec. It means that Andromeda is a bit further from us towards the direction of the universe's surface.

After a certain distance it is impossible to register a blue shift, although it has been confirmed beyond all doubts that moving towards, bypassing and colliding of galaxies must definitely result with a negative speed, i.e., a blue spectral shift (approaching of some galaxies to other ones).



Therefore, a blue spectral shift is a common law of nature, significantly present in the universe because of the rotation of the whole volume. The objects closer to the centre rotate relatively slowly and the objects in the outer area of the universe rotate at the fastest speed. The speed of rotation increases in the direction from the centre of the universal volume towards outside, or decreases in the opposite direction, i.e., from the universal surface towards its centre.

The cretion continued on the eigth day

Already at the end of the previous millennium, a research to find a spontaneous disintegration of proton ingloriously failed. At the end of the research it had been stated that a spontaneous disintegration of proton does not take place within the range of 10^{33} and that it is more likely to happen at the order of magnitude of 10^{99} , which is impossible to verify.

Something interesting and similar takes place when a star explodes. When objects that are 1.4 and more the size of our Sun explode, the accepted term is that an implosion or a collapse of a star took place, under the influence of the gravitational force (at that moment, it equals to 10 masses of the Sun). Accepting the theories which have found the solutions outside physics needs to have serious reasons. Not before 2005./2006. did these reasons become obvious. During an explosion, an object (a star) loses a large part of its mass, which needed to be compensated. That was accomplished by introducing black holes, neutron stars and white dwarfs (by no means red or brown ones!).

A big problem to this subject occurred when the following opinion took place, that matter was created all at once and that it was an unchangeable and finite quantity forever.

Even before the construction of an accelerator, the scientists found out that a disintegration of matter occurs, because they were regularly recording a muon landing from the universe to a laboratory (a muon is a part of a particle, i.e., of a proton, which has a negative charge within a generally positive particle). When colliders appeared, we saw and we can still see how and to what particles matter disintegrates, i.e., how protons, neutrons and electrons disintegrate. There is no doubt whatsoever that a matter disintegrates during the collisions at very high speeds. At that time, the visible matter turns into an invisible one. With a few short delays, which are called the particles, it turns into an elementary matter.

A problem occurs when we don't want to integrate this knowledge into the already-existing weak theories, which are more inclined to look for the answers in the fairy tales outside the frame of physics. We know very well which percussive forces are created when any star explodes, and yet, we don't want to consider the results obtained by the colliders as a correct interpretation of the event, just as if it were two different worlds involved. There is an endless quantity of high-value collisions within an explosion, similar or even the same as they occur in the supercollider, and yet again, we continue to interpret the loss of matter and mass outside the frame of physics, rather than through the disintegration of matter. It is clear now why did those stories of the mini black holes appearing in the CERN institute come out; if it was not possible to create mini black holes in these unimaginably strong collisions, how can then exist their larger counterparts – and the conditions for their appearance are almost the same as in the so-called Big Bang.

The period before the colliders' technology and thus obtained knowledge have appeared can be understood and justified, but by no means can it be done the same way after the knowledge of the possibility for a mass to disappear.

The type 1a stellar explosions need to be related to the stellar objects of a lesser illumination, which are no dwarfs either, because the loss of mass should not be replaced with something that doesn't exist (there are white dwarfs, which are just the regular stellar objects, the stars in formation), and it is obvious at the larger explosions.

The loss of matter should be replaced the way Fred Hoyle suggested the particles are created, which has, by the way, been confirmed by the sub-atomic research. The formation itself should be related to the quantity of disintegrated matter (he suggested one, and only on Earth billions and billions disappear daily, which has been confirmed by the muon landings from the universe, due to the charge opposition between Earth and muons). The disintegration is the end and the formation of matter is the beginning of the process of the fundamental matter circulation in the universe.

What are the dimensions of destruction and creation int he Universe

The explosions of stars, known as novae and supernovae, are the final stage of life for these objects and the matter that creates them. Most of that matter, but not all of it, is

being disintegrated, i.e. it returns into energy and dark matter, while the rest remains as nebulae.

In order to realize the magnitude of the matter disintegration, it is necessary to begin with the fact that supernovae originated from the huge stars, some of which are many million times larger in terms of mass than our Sun. On average, 400 different novae per year have been detected in the last few years. Let us suppose that there is only one nova (or supernova) on every billion of stars; it would mean that there are 200 of them in our galaxy. Their quantity is, of course, by far larger than that, because it is estimated that three of them occur per every 100.000 years in the galaxy (of course, that their number is far greater because different data show that happens one in galaxy in 100-100.000 years (at 13.7 billion years / 100-100.000 = 137.000 to 137 million explosions of stars in the Milky Way!))..

There are over 100 billion of galaxies in the Universe. Our galaxy is an average one. There are no less than 200 x 100 billion (or 20 trillion (20×10^{12})) of novae. Since an average nova (i.e. a star before becoming a nova) is no less than a 1000 times larger than our Sun, we get astonishing 20 quadrillion (20×10^{15}) of the disintegrated Sun's masses – even though that is a minimum of a minimum. (The mass of Sun is 2×10^{30} kg).

Let us point out that every star, before becoming a nova, had some 0.2% of its mass in other objects within its orbit. They also suffered a catastrophe, whether they were inhabited or not.

Despite destruction (the disintegration of matter), the observations show that the Universe is not losing its mass. On the contrary, it increases. It means that the Universe is efficiently replacing all of the lost matter, the minimum of which is 20 quadrillion of the Sun's masses, and even "some" more.

It is not to be forgotten that a smaller part of matter is also been disintegrated in the collisions of waves and particles. In order for the muons to be registered at all in the laboratories, a countless number of particle disintegrations needs to occur. It is an everlasting occurrence on the objects orbiting around a star from the beginning of time till these days and until a star becomes a nova. A good portion of matter is being disintegrated in the collisions of objects and galaxies. Therefore, the colossal dimensions are not related only to the creation of matter, but also to the growth of all objects within stellar systems, galaxies and the Universe. Millions of craters are only a reminder of that process being contiguous and ongoing. Due to the energy friction, the neutrinos are created. Then, they start joining into the electrons and are further combined into the protons and into ever larger atoms. The atoms join into the molecules and create gas, then dust, rocks ... the objects that become the planets around a star ... and ultimately the most of matter is being disintegrated through explosions and returned again into the elementary matter (energy and dark matter).

In order for the explosion to happen, a very specific sequence of events is required. It is obvious that stars grow into the centers of galaxies, 200 billion of which are there in the

Universe. That is important to state, in order to rule out the significant importance of the mass or size of an object, as these are evidently not so important. It is not the case of combustion or consumption of fuel here; it is obvious from the whole spectrum of different values in terms of mass and radiance (rotation) that belonged to an object before the explosion. A pattern or regularity is not discerned in these parameters.

One object becomes a nova and a large number (millions) of others with the same parameters just go on the same way. It is necessary to consider some very rare factors, like, for example, the impacts of large objects into planets, but even more rare – those that hit only a small part of the objects (one event in more than ten million of objects - stars).

Within the growth of an object, some smaller object is starting a reaction when colliding with a star. If that should remain a rare event, it needs to be a specific event under the specific conditions. The only possible specificity is for that object (the errant objects, incoming from outside the Solar system) to arrive vertically onto one of the poles and to hit the opening of a cyclone that exists on the poles of stars. That way, it would get an opportunity to break into the interior of an object. Comet ISON is the evidence that objects with vertical trajectories really exist in the Universe.



When discussing the vertical trajectories, it is necessary to point out that only the forces of attraction exist there, because an object creates the forces of repulsion in the horizontal direction only. That way, a disaster is inevitable. Due to the friction, an object explodes. That event becomes an active detonator that starts a cascade sequence of events for the whole star. In these days, this possibility for our Sun to disappear is completely unknown; therefore, these deadly objects are not even been followed and nothing is also been done to get ready to deflect such a threat, which is by far more deadly than would be the impact of the same object into our planet! The size of an object needs to be sufficient to start a large scale event, which would influence the whole galaxy.

Traslated by: prof. Zoran Ćoso (Zule); mail zcoso@unizd.hr