## "Gravitational wave" doesn't exist

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Abstract: According to the theory and opinion of natural external force and natural repulsive force, "gravitational wave" doesn't exist. Therefore, LIGO cannot detect gravitational wave produced by two black holes with stellar system level 1.3 billion years ago.

Key words: Natural external force, natural repulsive force, gravitational wave, detect, LIGO

On February 11, 2016, the LIGO Scientific Collaboration announced to the world that, through the Laser Interferometer Gravitational-wave Observatory (LIGO) on September 14, 2015, for the first time they directly observed the gravitational waves produced by two black holes with stellar system level 1.3 billion years ago. This great detection immediately made a stir in the world, and became hot spot of all the news and medias, which caused people's great attentions for gravitational waves.

What are gravitational waves? According to modern physics, gravitational waves predicted by Einstein's general theory of relativity are the space-time fluctuations with the speed of light, like throwing a stone into the water will create the ripples, gravitational waves are considered as "space-time ripples" in the universe. If considering space-time as a big rubber membrane, and using the small ball to replace the celestial body, when the small ball is placed on a rubber membrane, the mass of the small ball will press down the rubber membrane. At this time, if putting a ball in the next, the "curvature of space-time" caused by the two balls respectively will make them gradually closer each other. When they run the acceleration motion, the generated "ripples" are the gravitational waves.

So, what's different between Einstein's concept of gravity and Newton's gravitational theory? According to the viewpoint of Newton, between mass objects having a tendency to draw close each other, this is named the mutual attraction between mass objects, also known as gravity. But what is the nature of gravity, and why the gravity can transmit instantly? Newton does not give a reasonable explanation, that provides an opportunity for Einstein to present his own viewpoint of gravity. Einstein said that there is not gravity for mass object itself, the gravity is due to the curvature of space-time caused by mass object, as for gravitational waves, gravity is passing at the speed of light through gravitational waves. Comparing Einstein's concept of gravitation and Newton's gravitational theory, they are fundamentally different. Although Einstein's gravitational waves can explain the reason that gravity can transmit instantly, but it still cannot explain the nature of gravity. This shows that both Newton's theory of gravity, or Einstein's theory of gravity, there are some defects, and not the final theory.

The universe is the matter's universe. According the theory of natural external force, the real universal matters can be divided into mass matters and energy matters, namely, the mass matters exist in the forms of macro-objects, micro-particles, and the like, and the energy matters exist in the form of space. The mass matter is the matter with gathered form, the energy matter is the matter with discrete form, both of mass matter and energy matter are all independent forms of matters, they can be converted each other, this

transformation is not the matter's "elimination" or "creation", but through the "mass defect", "quantum fluctuation", "vacuum polarization" show the mutual transitions of matter forms. Mass bodies in the universe are always in the form of "immersion" in the space energy field. Mass bosy and space energy field are interdependence, namely you are in me, and I am in you. According to the theory of natural external force, universal space energy field has the properties of contraction and aggregation, that always take mass bodies as capturing objects; to "enwrap", contract and aggregate mass bodies, will make mass bodies to gather and approach each other. Space energy field, in the process of contraction and aggregation of celestial bodies, realizes changing energy into mass. it provides matter to mass celestial bodies, makes the mass of mass celestial bodies changing from small to big, and penetrates to mass celestial bodies' core focus confrontation, makes mass celestial bodies' core energy hoarding, changes mass into energy, forming energy radiation (release) rooting in the core (namely repulsive force radiation), and forming the individual natural repulsive force field. In the universe, individual natural repulsive force fields of all the mass celestial bodies are mutual superposition and mutual blend, namely forming the integral natural repulsive force field (space energy field) of the universe, this is the two-force-cycle of natural external force and natural repulsive force, and reveals that the essence of natural external force and natural repulsive force is energy. The speed of the contraction (gather shooting) of space energy field and the expansion (radiation) of celestial bodies energy field is equal to the "speed of light", the spreading speed of natural external force and natural repulsive force is also equal to the "speed of light". The relationship between force and energy, not only illustrates the nature of the force, but also illustrates the instant delivery of the force.

The essence of contraction and gather of natural external force, illustrates that the mutual gather and approach of universal mass celestial bodies is not caused by the action of gravity, it is caused by the action of natural external force. Because natural external forces are superposition and blend of many individual mass celestial body's repulsive force fields, so the contraction and gather of a certain mass celestial body acted by natural external force can also be understood as the action of many other mass celestial body's natural repulsive force fields (that are 3D-distributed on a certain mass celestial body) to this mass celestial body. With the action of natural external force, in the process of mutual aggregation, the mass celestial bodies are also mutual repulsive force field confrontation, resulting in the mutual agitation and rubbing between mass celestial bodies' repulsive force fields, thus not only form the angular momentum of mass celestial bodies, form the mutual surrounding and "rotation" between mass celestial bodies, or small mass celestial bodies' "revolution" and "rotation" around the large mass celestial body. Meanwhile, the energy "vortex turbulence" is also formed at the focus of mutual confrontation and friction between mass celestial bodies' repulsive force fields. Such as: as the galaxy is acted by the shrinkage and accumulation of natural external forces, the stars in this galaxy will move toward to the galaxy center with the manner of spiral and gradual progression, that makes many stars were gathered in the center of galaxy with mutual repulsive force confrontation, mutual grinding and rubbing, and forming galaxy center's energy "vortex turbulence", namely galaxy center's "black hole". The galaxy center's "black hole" is the "pole out" point for galactic matter's "latitude enter and pole out", not only it can be

regarded as "black hole" (the energy matter is pushed to enter), but also is a "white hole" (the energy matter is pushed to release). Through the significant trends of "latitude enter and pole out", the galaxies realize the whole process for mutual mass-energy conversion of galaxies' matters, at the same time showing the evolution of galaxies. With the action of contraction and gathering of natural external forces, through many stars' mutual aggregation, spiral and gradual progression, forming many stars' mutual surrounding, mutual repulsive force field confrontation, mutual grinding and rubbing, and forming the energy "vortex turbulence" at the focus of many stars repulsive force fields' mutual confrontation, namely the "black hole" and "white hole" at the center of many stars. Therefore, the "black hole" can be found everywhere, so does "white hole". But no matter what level of "black hole", it is the product of mutual confrontation, grinding and rubbing between natural external force and natural repulsive force, or between natural repulsive forces, is the energy "vortex turbulence", and is the radiation point for mass-energy conversion, rather than a dense mass celestial body. Einstein's gravitational wave is built on the base that "black hole" is a dense mass celestial body, for the reason that "black hole" is not a dense mass celestial body, then the "gravitational wave" does not exist. "Black hole" is the energy "vortex turbulence" existed at the core of mass celestial bodies, such as the "black hole" existed at the core of galaxy, the "black hole" existed at the core of many stars that are mutual surrounding, and so on. With the action of contraction and gathering of natural external forces, the mutual aggregation and mutual confrontation between mass celestial bodies, firstly display the confrontation between mass celestial bodies and mass celestial bodies' repulsive force fields, rather than the direct confrontation between the mass celestial bodies and the "black hole" located at the core of the mass celestial bodies. The confrontation between mass celestial bodies and mass celestial bodies' repulsive force fields, will lead to the indirect solid destruction of the mass celestial bodies, the mass is changed into energy, even create the supernova burst, once the mass celestial bodies disappear, the "black hole" located at the core of mass celestial bodies will also disappear. Therefore, there is not the astronomical event of the combination of two "black holes", and further, there is not the gravitational wave created by the combination of two "black holes".

From another angle, natural external force's action of contraction and gather for mass celestial body, will promote mass celestial body's natural repulsive force emission (radiation) caused from the core, thus forming the two forces interlacing of natural external force enter and natural repulsive force out. In the course of mutual interlace, confrontation, damping, holing, and friction of the two forces (natural external force and natural repulsive force), forming the specific wavelength, frequency and amplitude. Therefore, natural external force and natural repulsive force themselves are a kind of wave, and a kind of energy wave. Natural external force wave and natural repulsive force wave are different from other light wave, electromagnetic wave, x-ray, and other kind of wave and ray, that lie in their own particular wavelength, frequency and amplitude. Natural external force wave and natural repulsive force wave cannot be shielded and masked by other substances (objects), they are always mutual interlace, confrontation, damping, penetrating and friction, so as to enable the matter to mass-energy mutual conversion, keep the perpetual motion of matters in the universe, and become the power source of universal movement

and evolution. While, for light wave, electromagnetic wave, x rays, and the like, though they are also a kind of energy wave, but due to their different wavelength, frequency and amplitude, and show their different properties, thus determine the light wave, electromagnetic wave, x ray, and the like can penetrate certain substances (objects), but can be shielded masked by some substances (objects). This is the difference between light wave, electromagnetic wave, x ray, and the like; and natural external force wave and natural repulsive force wave.

According to the theory of natural external force, all energy radiations sourced from the cores of mass celestial bodies, including the energy radiations sourced from the galaxy core (black hole, white hole), and the core encircled by many stars (black hole, white hole), and so on, they are all the result of the mutual action of natural external force and natural repulsive force, and the running mass-energy conversion process of mass matters in the form of "mass defect". Therefore, the energy radiations sourced from the cores of mass celestial bodies, including the enter through energy gather shooting \_\_\_\_\_"black hole" and the out through energy gather shooting \_\_\_\_\_"white hole", from the perspective of force can only be referred as external force gather shooting and repulsive force radiation, rather than the gravitational wave radiation.

For this gravitational wave event, Alan Adams, theory physicist of MIT, United States, said in his TED speech: "1.3 billion years ago, in a distant, distant galaxy, two black holes locked into a spiral, falling inexorably towards each other and collided, converting three Suns' worth of stuff into pure energy in a tenth of a second. For that brief moment in time, the glow was brighter than all the stars in all the galaxies of the known Universe. It was a very big bang. But they didn't release their energy in light. I mean, you know, they're black holes. All that energy was pumped into the fabric of space and time itself, making the Universe explode in gravitational waves."

To interpret "converting three Suns' worth of stuff into pure energy", actually this is the so-called "mass defect" in mass-energy conversion process according to natural external force theory; and "all of energy are released to the surrounding space-time", according to natural external force theory, these are external force wave gather shooting sourced from the cores of mass celestial bodies or "black hole", and repulsive force wave radiation of "white hole", rather than the gravitational wave radiation. The reason that modern physics said that this phenomenon was the gravitational wave radiation, it was the preconceived inertial thinking of "gravitational wave view". In fact, physicists know that "gravitational wave radiation" or "radiation gravitational wave" to express the meaning of both attraction and exclusion, which is a contradiction.

Referring to this gravitational wave event: "converting three Suns' worth of stuff into pure energy", and "all of the energy are released to the surrounding space-time, so as to initiate gravitational wave ". It confesses that the gravitational wave is from energy conversion, and the nature of gravitational wave should be the energy. But, for the reason that Einstein's gravitational wave is the "space-time ripple" and "curvature of space-time", and the mathematical concepts of time and space, rather than the matter concept of energy. Therefore, even the physicists realize that gravitational wave is from energy conversion, they also do not directly describe that gravitational wave is energy, and still

say that gravitational wave is the "space-time ripple" and "curvature of space-time".

About the authenticity of the gravitational wave detection, this time LIGO detected gravitational wave mainly through "listening", such as Alan Adams said: "So, the same is true of gravitational waves. We can't use them to make simple images of things out in the Universe. But by listening to changes in the amplitude and frequency of those waves, we can hear the story that those waves are telling. And at least for LIGO, the frequencies that it can hear are in the audio band. So if we convert the wave patterns into pressure waves and air, into sound, we can literally hear the Universe speaking to us. For example, listening to gravity, just in this way, can tell us a lot about the collision of two black holes, something my colleague Scott has spent an awful lot of time thinking about. If the two black holes are non-spinning, you get a very simple chirp: whoop! If the two bodies are spinning very rapidly, I have that same chirp, but with a modulation on top of it, so it kind of goes: whir, whir, whir! It's sort of the vocabulary of spin imprinted on this waveform. So on September 14, 2015, a date that's definitely going to live in my memory, LIGO heard this, if you know how to listen, that is the sound of two black holes, each of about 30 solar masses, that were whirling around at a rate comparable to what goes on in your blender. It's worth pausing here to think about what that means. Two black holes, the densest thing in the Universe, one with a mass of 29 Suns and one with a mass of 36 Suns, whirling around each other 100 times per second before they collide. Just imagine the power of that. It's fantastic. And we know it because we heard it. That's the lasting importance of LIGO. It's an entirely new way to observe the Universe that we've never had before. It's a way that lets us hear the Universe and hear the invisible. And there's a lot out there that we can't see -- in practice or even in principle. So supernova, for example: I would love to know why very massive stars explode in supernovae. They're very useful; we've learned a lot about the Universe from them. The problem is, all the interesting physics happens in the core, and the core is hidden behind thousands of kilometers of iron and carbon and silicon. We'll never see through it, it's opaque to light. Gravitational waves go through iron as if it were glass -- totally transparent."

For this event, China Science and Technology News Network published a paper entitled "LIGO really detected gravitational wave yet?" written by Mei Xiaochun and Ping Yu, and they question the authenticity of this gravitational wave detection. In this paper they say as follows.

"The problem is, whether or not LIGO really observed the colliding of two black holes? No, no! The authors carefully read the paper of LIGO published in United States «Physical Review Letters», and did not find a word to say that they actually looked into the astronomical phenomena of black holes colliding. LIGO used a backward reducing way, namely according to the signal of Laser Interferometer, with computer fitting to Einstein's theory of gravity, thus reaching the conclusion that at 1.3 billion years ago and 1.3 billion light-years away from the Earth there was two black holes colliding.

According to the official interpretation of LIGO, firstly through the a large number of computer's calculation, established a waveform library with a great number of information in advance. After LIGO Interferometer obtained the data, to compare with the various waveform in the waveform library, and find the best waveform to match the Interferometer data, which is the usual matched filtering method. Therefore, the so-called that at 1.3

billion light-years away from the Earth there was two black holes colliding, it is just the result of computer simulation, not real observation of physical events. .....

However, LIGO's official interpretation is: 'here we report two important scientific breakthroughs that Einstein predicted: the first time to direct detection of gravitational waves and two black holes collision and merging has been observed for the first time.' In other words, they observed two black holes collision and merging. .....

The computer simulation of LIGO experiment is based on Einstein's gravitational field, with the Laser Interferometer received signal to fit 1.3 billion light-years away from the Earth, and got the result that at 1.3 billion years ago and 1.3 billion light-years away from the Earth there was two black holes colliding. According to LIGO official saying: 'this experiment strongly showed that the general relativity passed the test perfectly.'

The problem is that, LIGO has not really observed two black holes merging, not observed 3 solar masses of matters are converted into gravitational waves. They observed was only a signal of Laser Interferometer, how they can say that Einstein's gravitational wave theory is confirmed?

Therefore, the conclusions of this experiment should be, assuming that Einstein's theory of gravity is true, the Laser Interferometer detected the Gravitational wave signals, then at 1.3 billion years ago and 1.3 billion light-years away from the Earth there was two black holes colliding, 3 solar masses of matters are converted into gravitational wave energy, and distributed into space. Results and nothing more, we can't say much more than that.

Thus it can be seen that, the proof logic of LIGO experimenter is problematic. Firstly according to the Laser Interferometer data and Einstein's theory (reason), to derive that at 1.3 billion light-years away from the Earth there was the gravitational wave outbreak of two black holes (result). Then according to the consistency of this astronomical event and the reading data of Laser Interferometer (reason), to prove Einstein's theory is correct (result). That means that the reason and the result are mutual reason-result, and this is a circular argument. However, as we all know, circular argument is logically invalid. "(From February 25, 2016, China Science and Technology News Network)

Logically, the energy release of this gravitational wave event, is the energy radiation, to interpret energy radiation, it is just repulsive force wave radiation, this is a very simple truth, how it could be the gravitational wave radiation? The so-called "gravitational wave" actually does not exist, taking a step back, even if this time the detection of LIGO is the real "force", then it can only be repulsive force wave, rather than "gravitational waves".

The sum (superposition) of all levels' celestial field natural repulsive force (radiation), that is a whole of any point's background field natural external force (gather shooting). At any point, the reverse staggered, damping, and confrontation of the two forces of natural external force and natural repulsive force, will generate a gradient energy level of two-way wave movement, namely the side of gather shooting to face reference system is the accelerative external force gather shooting wave, and another side of radiation to away from reference system is the negative accelerative repulsive force radiation wave. The bi-directional force wave generated by the reverse staggered, damping, and confrontation of the two forces of natural external force and natural repulsive force at any point, to certificate that the gather shooting rate of external force wave to celestial body is

increasing, and the repulsive force wave radiation rate emitted by celestial body is decreasing. Meanwhile, it also explains that the light speed radiated by celestial body is diminishing, not only it is impossible that the light speed is constant, even it is impossible that the speed is greater than light speed. While, the external wave gather shooting to the Earth is the equal imprison, and get zero result, this the same as the zero result of the gravitational equal imprison of Michelson-Morley Experiment. Therefore, it is impossible that LIGO can detect the subtle change of external force wave equal gather shooting, so the "gravitational wave" does not exist at all.