From Galaxy to Einstein and Abu Sa'id Abu al-Khair

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Abstract

The contemporary physics leads us to a kind of worldview that its starting point is mysticism. Besides his modesty, Einstein propose theory of general relativity and space-time curvature in science temple that today after 100 years in 1394 is proved. This important news excites astrophysicists so much that made Abu Sa’id Abu al-Khair sing and dance. Maybe the thing that Einstein knew 100 years ago, Abu Sa’id has known it 900 years ago and we found it out now. For understanding 4-dimension world and space-time and hearing sound of birth or crashing of stars and black holes and recording it, a device is required called LIGO and seeing the image of uniqueness of wave, particle and space-time curvature is not possible for those who have 3-dimentional view but it seems that true mystics such as Abu Sa’id, Attar, Rumi and etc released 3-dimentional world with their meditative states and reached higher dimensions that fundamental truths have come in their perception and their spiritual ears heard universal music and they sang happily and danced mystically. Since young generation is thirty for linking modern science with mysticism and steps in this way; the writer of this article tries to examine and use data based on written references of research domain and a little understanding, we focus on life and theory of Einstein first and then Abu Sa’id briefly. Then we discuss about common aspects among contemporary physicists and mystics specially Abu Sa’id. Finally we conclude that mysticism does not require modern science and scientist does not require mysticism but it is clear that this is us that require both of them and with convergence of mysticism modern physics can be led to humanity gate.

Keywords: Mysticism, physics, Abu Sa’id, Einstein.
Introduction:
Nature of human being always tries to develop a simple and general image of world around it; mystic, poet, philosopher and physicist step towards their goal based on their own way. Contemporary astrology and physic lead us to a kind of worldview which its start point is mysticism. Cosmic rays are watched at far way by the strongest astronomical telescopes. The same lights and stars might have been destructed million years ago and now their light has come to us. Mystics such as Abu Sa’id Abu al-Khair, Attar, Rumi and physicists such as Newton, Einstein and Max Plank are stars that their science and thought lights would remain for several years. Since with increasing and wondering development in technology, young generation is thirsty for linking modern science and mysticism and steps briefly in this way and Iranian has placed a section about mysticism in translation of physics books and recently they have published some books about it. It is right to step in this way strongly. The writer of this article tries to examine and use data based on written references of research domain and a little understanding, and focus on life and theory of Einstein and Newton’s special relativity theory and Einstein’s general theory, with stating gravitational waves tries to express an important new about discovering space-time curvature and proving general theory (gravitational waves) of Einstein in February 2016.
In mysticism section with a look at the life, thought and words of Abu Sa’id, the paper terminates the study by stating common aspects of physics and mysticism.

1- Physics Section
1-1- Einstein Life
Albert Einstein was born in UML in March 1879 and died in April 1955 in Princeton, USA. His father was Herman Einstein. Einstein was a German theoretical physicist, he is well-known more to theory of relativity and specially for mass-energy equivalence (E=MC²) which is of the most famous physics relationships among non-physicists. In addition, He was a major contribution to the development of quantum theory and statistical mechanics. Einstein received the Noble Prize in 1921 for his services to Theoretical Physics, and especially for his discovery of the law of the photoelectric effect. He is known as one of the greatest physicists in the world for his significant effects. He is the one who presented theory of relativity and most of great scientists call him unique genius and the greatest scientists of the world. Most of Einstein’s theories and studies caused some essential changes in science development in the world and he had stable effects. His services in science are admirable. Although he died in 1955, he is still alive. Somewhere in the world…. Where life of Einstein is continuing, there are planets at the size of earth that are several light years away. The lights emitted from earth get there many years later and Einstein has not born yet! Time depends on its viewer.

1-2- Special Relativity (Newton)
“Newton’s laws of motion describe how the majority of objects move from cricket ball to car.” (Jouan, 1392)
1-3- General Relativity (Einstein)

“In 1905 Einstein took the first step in order to achieve a deeper and wider theory in physics that is general theory. The rise of this theory can considered as the end of the conventional age and the beginning of a new era for physics. Since the theory on one hand it uses traditional notions and relied on continuous and extensive space – time and on the other hand it exploits the causal laws of nature, or in other words the principle of necessity sequence from effect to cause. But the theory complains about the conventional Newton principles of space and time and presents two novel revolutionary concepts for space and time.” (Boren 1383)

“Einstein showed in 1905 that when objects move so fast, unexpected results are obtained. If speed of an object approaches speed of light, it is observed that it becomes heavier, its length is more contracts and its life becomes so slow. The reason is that nothing can move faster that light speed, thus there is a disorder on the border of this world speed in time and space.” (Jouan, 1392)

1-4- Gravitational Waves (space-time)

“According to general theory, the confluence of two great bodies- such two black holes- can causes curvature in the intertwined range of space-time. For better understanding of the theory, imagine space-time as Cloth spreads out on a soft surface. If two bowling balls start spinning around each other, they make wrinkle on it. According to Einstein’s word, colliding and coalescing two black holes will have the similar effect on space-time.

The waves resulted from two black holes colliding move from source toward outside and they cause c space-time confusion around space objects, including earth.

1-5- Important News; discovering space-time curvature and proving Einstein’s General Theory

It is almost 100 years ago that Albert Einstein proposed the existence of theory of space-time gravitation waves; but because of lack of necessary technology, he couldn’t prove it. Now scientists have successfully proved the theory.

American scientists could observe gravitational waves successfully. A discovery that results in better understanding of universe opens a new window to galaxy. Researchers of Laser Interferometer Gravitational-Wave Observatory (LIGO) said that they were able to recognize such a wave after the collision of two big black holes 1,3 billion years ago. About a century ago in 1915-1916, Albert Einstein predicted the existence of gravitational waves in his theory of general relativity but because of lack of necessary technology he couldn’t prove it. Today researchers of MIT and Caltech control twin LIGO observatory for observing gravitational waves. This observatory is able to observe small vibrations of crossing gravitational waves. In 2016, LIGO noticed signal of energy which was 50 times more than total energy of stars of the world. LIGO team worked on the signal about 5 months and after changing it into audio file, he listened to the collision sound of two great black holes. The reason of importance of discovering gravitational waves is that these waves can partly answer the existing questions about the
beginning of creation. Astronomers in addition to look at the space, they have a special view toward date and time. For observing distance of 14 billion light years, we can follow the light which start its motion 1.3 billion years ago. No matter how strong our telescopes are, we can’t examine the first years of our galaxy age and its reason is its high density that even limits the light. Here gravitational waves have a lot to say because it is likely that these waves have recorded their existence from beginning of creation.

2-Section of Mysticism

2-1- Life of Abu Sa’id Abu-al Khair

“Abu Sa’id Faz-ollah ibn-Ahmad –ibn Ibrahim known as Abu Sa’id Abi-al Khair is one of the great mystics in centuries 4 and 5 and was born on Sunday first of Moharram in Mihaneh, an area between Abivard and Sarakhs and died there on Thursday fourth of Sha’ban in 440 Ah.” (Shafi’ee Kadkani, 1366) The great and important part of Abu Sa’id life was spent in Naishbour and in his birthplace Mihaneh. At childhood, his father took him to Dervish and Sufi rituals; then with understanding fact and because of interesting in mysticism and Sufism, Abu Sa’id liked Dervishes of Mihaneh so much and commuted in their rituals.

Abu Sa’id had so many Murads on the way of truth and took a lot of austerity and he used the presence of greats such as Abu-ol Qassem Bashar Yassin and Luqman Sarakhsi. He was interested in mysticism from childhood and enthusiasm and happiness are clear among his narrations at all levels. He was not a poet and did not compose except three poetic lines but he has read so many poems in whirling and dancing ceremonies. Also there are beautiful words and narratives of him. With particular attention of divine to him, the old Khorasani man had seized power in nature and has gone beyond time and space and he used this power in timely manner and for guiding people.

2-2 the bright Jewel of Abu Sa’id’s Nature

Focusing on life and words of Abu Sa’id the well-known mystic of Iran from different views can’t be included in this article but we can notify a little of his nice traits and ethic.

Abu Sa’id is an enlightened mystic who lives among people but never forgets and neglects god even for a moment. What is important for him is not leaving the world and its blessings but having god in front of his eyes.

He selects piety and wisdom and it dominates him completely. Some time he combines his piety with happiness and he shows happily his presence before god with poetry, music, dance and song.

It seems he went beyond the 3-dimentional world and crisscrossed space-time and understood and cognized the fourth dimension and parallel worlds.

“Dance for Abu Sa’ied was a liturgy that influenced by passion of “time”, he danced unconsciously”. (Mayer, 1378) Dancing and whirling brought him from material world to other
worlds and in cosmic religion a planter entered solar system and he did Tawaf with music of galaxy. “swirling for Abu Sa’id is food of spirit.” (Mohammad ibn MOnavvar 1376) The effort of Abu Sa’id for freedom of oneself, dictatorship and judging other and avoiding false piety and etc they are lessons for achieving human perfection. This mystic knew mysticism and Sufism as something that should be experienced not described.

The other jewels of his nature are avoiding prejudices, respecting all creatures without considering their religion and spiritual manner. Abu Sa’id liked that all religions and sects be united and look at one fact, that is the holistic thought that has made modern science specially physics discover this that the world is a great thought not a great machine.

At the end we should say that life of Abu Sa’id is lighted by a happy deep light and reached the divine light.*

3- Section of common aspects of physics and mysticism

3-1- Argument of order and wonder

Human nature always tries to create a simple and general image of the surrounded world for himself. Mystic, poem, artist, philosopher, natural scientist and physicist, each of them does this from their own view and way. In this image for finding peace in the chaos of routine activities with relying on perceptions and principles that are the foundation of theoretical buildings. However when a physicist finds out a great order among chaos and confusion, he wonders. An order which is related and depends on world of perceptions. The order which the mystic sees it with his insight and becomes happy and unconscious. This is the order which is called "pre-established order" by Laip Niter. (Planeck, 1392)*

Physicists are so interested in realizing the "pre-established order“. Those who such as Einstein and Max are really interested in this love that waters their souls .Max Planeck said: " this sentence has been written on the head of science temple: you should believe in it” (1392) and Josef Morphi quoted from Jouan Gothe: "the supreme perfection that human thought can understand it is a wonder feeling that is reavled before manifestations of nature." (Planeck, 1392)*

As music greats understand internal consistency that others are unable to find out, a mystic can also listen to the music of universe with self-purification and approaches understanding the universe which makes him so happy and leads him to dance and become unconscious, then he sometimes plays the circulation of sky with tambour and sometimes with poetry.

3-2- Diversity along with unity- holism

This is nice that modern science originated from Newtonian mechanical view and Cartesian separation and Einstein's quantum theory and proving space-time curvature, modern science resulted that survived the holism and unity theory that is the theory of mystics and old philosophers and mathematical chaos theory says that: "each of components of environment is
related to each other and in fact components and different species of the nature are various .. that indicate the unlimited fact and just their covers are different and behind these covers there is a single fact." (Zamani Moqaddam 1382)

We should note that Hatef Isfahani said that "all the world is the same and there is no other one except Him", so there is a unity behind this diversity.

3-3 Crossing from Space-time

Since "Galaxial beams in far distance can be observed by the strongest astronomical telescopes. The same source of lights and stars that might be disappeared million years ago and their lights have been reached to us and the lights keep reaching to earth million years later. Therefore all events that happened million or billion years ago can be observed in a point of space. If Abu Sa'i'd reads inner thoughts of seeker and he informs of what comes to heart of seekers indicate his understanding and capability of using this part of space because these beams have been moving from many years ago and carrying the events.*

The integration of space and time states that all events that have occurred in universe can be explored in a situation in space and past, present and future are arbitrary definitions of our mind that have already understood them. As we see some mystics such as Abu Sa'i'd, Attar, Rumi and etc went beyond time and space.

"some philosophers and sufis know rotational movements of spheres resulted from their spiritual love toward their god. Some of them wanted to discover the sound of god in music of nature and survive the love of god through this notion." (Mayer, 1378)*

Sheikh Abu Sa'i'd also speaks in guiding people in lovely manner and enjoys from uniting all sects and even religions and he encourages avoiding sciences that Satan causes, and knows burying them or leave them on water as a way for releasing the world and body. As "Sheikh al-mashayeikh Abu Sa'i'd Fazzollah ibn-Mohammad Almahini leave his book on water." (Mohammad ibn Monavvar, 1376)*

Abu Bakr Varaq did not obey his instructor to leave books on water and says: "I couldn't throw my book to Jeihoon". I came home and said that I threw them. Wise man said: what did you see? I said: nothing. He said: go back and throw them in water. I came back and threw them in water." (the same, 1376) The reason is that mystics has released from the world's belongings and fame during dancing and whirling like a planet that comes out of earth space and circulates in orbit of the solar system around fact sun and the only god and they are like light that connected to universal sun.

3-4 Concurring physics and other sciences with mysticism

We can see another nice picture of concurring physics and sciences with mysticism. The key of secrets of atom is in hands of Einstein and in physics is discussed about parallel worlds as Attar composed about it in his Manteq-ol-Teir.

Root of mysticism (sufism) in Iran is several thousand years old. "Ancient Persian mystics had done a kind of meditation in their spiritual journey which was called "director" and they used
special citations for their peace which were called "Roobast". Modern research which is done in valid scientific centers for understanding meditation, disappears superstitions and reveals scientific aspects. Results of research show that different meditations can have various effects such as spiritual and mental tranquility, reduction of breathing tone, reduction of blood pressure, reduction of toxins in body and increased activity of the autonomic nervous system and etc."(Planeck, 1392)

Mystics such as Abu Sa'id Abu-al Khair, Bayazid Bastami and etc had relied on meditation for releasing themselves from body veil and approaching absolute nature. This action revealed world with higher perception dimensions and sometimes they made them so excited that like our Sheikh he danced and sang so that after his death he wanted people to dance on his dead body and play tambourine and flute on his grave and he also did the same in some mystics’ funeral ceremonies.

3-5 Characteristics and view of Einstein
The world has seen many pride and stubborn geniuses. What makes Einstein separate from others is his humility that makes him step in way of presenting his own theories confidentially; at the same time he wondered about beauty of nature humbly. He writes:" In rules of nature, spirit and mental are clear; spirit which is higher that human spirit. Spirit that we should stand in front of it humbly with our average power. By exploring science, it takes us to a special religious perception. For some people, Miracle is an evidence for existence of god. For Einstein lack of miracle reflects will of god. This fact that all of universe is understandable, it means it follows some rules; it is worthy that makes us wonder. This quality is a description of "a god that reveals himself in consistency of all creatures." (Isakson, 1389)*

Einstein knew this respectful sense and universal religion as the origin of all arts and natural sciences, this is what guided him in all of his life.

4- Discussion and conclusion
In the paper, with a brief look to physics (Einstein theory) and mysticism (Abu Sa'id Abu-al Khair) and stating important news, proving gravitational theory or space-time curvature by LIGO which opens a big window to universe, it can be found out that mystics went beyond skies so many years ago by self-purification and spiritual journey. Few research has been conducted about physics and mysticism but nobody has focused on Abu Sa'id interest in dancing, whirling and universal music and adapting it with proving gravitational waves yet.

What Abu Sa'id might has seen 900 years ago Einstein Saw it 100 years ago and today with proving gravitational waves by LIGO we found that science and mysticism are a drop of knowledge that is connected to god by relying on him. At the end it is proposed that a new course called "mysticism and modern sciences" will be thought in universities that may water the thirty soul of young generation.
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