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Analysis of the Reasons Why the Moon Formed Earlier than the Earth

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Abstract: After the birth of the sun, planets and satellites formed. Since the mass of the moon is much smaller than that of the Earth, the heat exchange rate of the moon will be faster than that of the Earth. Therefore, the lunar nebula will complete the condensation process faster than the formation of the Earth.

Keywords: Primordial Earth Nebula - Primordial Moon nebula

1. The introduction

In astronomical observations, it is indeed observed that the newly born star will eject a large amount of gaseous material into space (T-shaped stellar wind). Therefore, it can be believed that the radiating material around the sun after its birth will produce the surrounding material around the sun, which is the material for the formation of rocky inner planets and the moon.^[1] The production of different elements is a hydrogen-helium chemical reaction that occurs under certain temperature and pressure conditions. The gaseous exoplanetary material, however, is unlikely to have originated from ejections from the sun, but rather from the outer nebula of the original solar system.

2. The formation of the Earth and the Moon

After the birth of the sun is the formation of planets and satellites, because the moon mass is far less than the Earth, the moon heat exchange rate will be faster than the Earth, therefore, the moon nebula will complete the condensation process faster than the formation of the Earth earlier.

In the astronomical observation, it is indeed observed that the newly born star will eject a large amount of gas material into space (T-shaped stellar wind). Therefore, it can be believed that after the birth of the sun, the radiating material around the sun will generate surround-material around the sun, which is the material for forming rocky inner planets and the moon. The formation of different elements is a hydrogen-helium chemical reaction that occurs under certain temperature and pressure conditions. The gaseous explanatory material, however, could not have come from the ejections of the sun, but from the outer nebula of the original solar system.

The sun after the nuclear material on the equator in under the action of centrifugal force and high temperature gas pressure to the outer space radiation movement, as the distance is farther and farther away from the sun, first to metallicity matter condenses out is rock material after setting out, the original which is full of mercury, Venus, earth (the moon) and Mars orbit, Primordial lunar material was found between the orbit of the primordial Earth and the orbit of the primordial Mars near the orbit of the primordial Earth. 4 inner planets including the dispersion of material on the moon's orbit each other constantly, first with high melting point of metallicity matter condenses out first, the heavier the proportion of the inertia of the inert material to prevent the light-weight material movement, in their original planets orbit material caused by the inconsistent speed vortex cloud, this is the planet of the early.^[2] With the passage of time, the diffused matter in the orbits of the respective planets at the center of the original planetary nebula cluster all contracted into the planetary nebula to form planets.

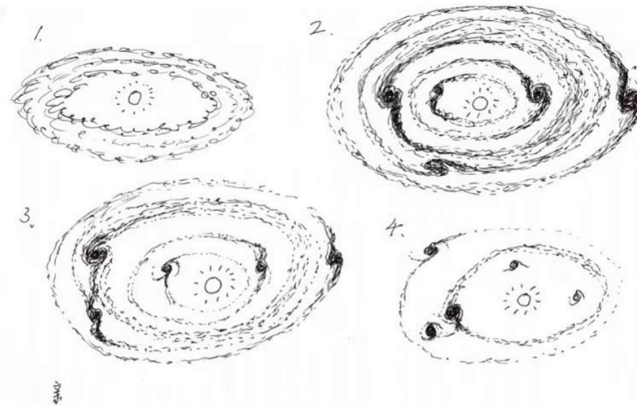
There is an interaction force between the matter in the center of the cluster and the diffuse matter in high-density area. The relative motion between the matter exchanges energy. The condensed matter in the outer layer of the cluster moves inward and the hot matter moves outward. There is an interaction between the original Earth cluster and the original moon star cluster, and the original moon tends to move towards the original Earth. Because the original moon has a certain mass of centrifugal potential energy, it can not be integrated into the original Earth nebula, but moves around the original Earth. Since the mass of the primordial moon is much smaller than that of the primordial Earth, the moon completed the heat exchange faster than the formation of the Earth. The heat exchange rate determines the condensation formation rate, which is determined by the mass. The heat exchange is the internal energy release of the cluster, the natural differentiation process between the relative motion of the matter, and the temperature gradually decreases. The nebula gradually shrinks.

The characteristics of the moon can show that the moon formed earlier than the Earth:

(1) The oldest rock on the moon is 4.5 billion years old, and the oldest rock on the Earth is 4 billion years old.

(2) The far side of the moon has more craters than the side facing the Earth, and the far side has thicker crust than the side facing the Earth.

This is because for a period of time, the primitive crust of the primitive Earth still had material in the position of the moon's orbit, and a small part of the material fell on the far side of the moon due to the moon's occlusion. Movement speed inconsistency between material flow system is a kind of relative motion^[3], the relative motion vortex nebula, vortex of original the moon change the direction of movement of material particles, due to the original quality centrifugal potential energy increases with the increasing of the moon with the original Earth nebula separation, the original and the original moon nebula surround Earth with material for each other and each has its own, There is only so much material in the orbit of the original moon. There is a strong interaction between the original mantle and the original crust material, which is a continuous whole. The original crust material all belongs to the original Earth, and the moon formed earlier when the Earth was not completely formed.



Newly born stars will spray gas material into space (T-type stellar wind). After the birth of the sun, the gas material ejected into space rotates around the sun, and there is interaction between the sun and the gas material. The more compression times of relative motion, the higher the density, the more metallic material with iron as the main element is produced under physical conditions. The heavy elements block the motion of the lighter matter, the lighter matter promotes the motion of the heavier matter, and the inconsistent speed between them creates a vortex system, which produces a vortex around the Sun: the original Mercury nebula, the original Venus nebula, the original Earth nebula, the original Moon nebula, and the original Mars nebula. The material in the orbits of the last four inner planets is concentrated in the center of the nebula, forming planets. Because the lunar nebula is close to the Earth, it is produced in sync with the Earth nebula^[4], but the mass of the moon (nebula) is much smaller than that of the Earth (nebula), the heat exchange rate of the lunar nebula is faster, the condensation rate is faster, and the moon formed earlier than the Earth. There is an interaction between the primitive moon and the primitive Earth, and the rotating centrifugal force of the primitive moon resists the gravitational force of the primitive Earth and reaches dynamic equilibrium at the present position.

In the primitive universe, nebula a and nebula b move and combine with each other to produce the primitive galactic nebula. The relative motion of dark matter and dark energy in the universe forms the primitive galaxy and the primitive star, and the braking effect of the relative motion slows down the motion of the nebula. The more relative movements, the slower the movement speed. The nebula in the primordial galaxy combined to produce the primordial stellar nebula, and the power of the external diffuse material promoted the contraction and change of the stellar nebula. In the later period^[5], a small part of the external material had a strong interaction with the central material, resulting in lightning and nuclear reactions, and the birth of stars began.

The mutual transformation process of energy and matter constitutes the evolutionary trajectory of cosmic bodies. Outside the universe, there ought to be a substantial accumulation of dark matter poised to coalesce into new galaxies and stars. The evolution of cosmic matter likely follows a cyclic developmental pattern, essential for the sustained existence of celestial bodies. Without such cyclical processes, celestial bodies would struggle to persist over time.

The newly born stars will eject gas material (T-shaped stellar wind) into space. After the sun is born, the ejected material will rotate around it. It will gradually separate into a sphere structure according to the distance between far and near space temperature. Because the motion speed of the materials is not consistent, a vortex like primordial star cloud will be generated, The interaction between the high-density area in the center of the primordial planetary nebula and the outer layer of the diffuse material makes the material diffuse in the orbits of the

respective primordial planets around the sun gradually converge into the primordial planets to form planets. The mass of the original moon is far less than that of the original earth, and its heat exchange speed is faster. The original moon was condensed earlier than the original earth. The distance between the original earth and the original moon is very close, and there is a strong interaction force. With the gradual increase of the original earth's mass, the original moon's orbit changes, and the original moon moves in the direction of the original earth. The centrifugal force prevents their combination.

As the mass of the primordial Earth increases its aphelion will get farther and farther away and eventually coincide with the orbit of the primordial moon and the orbit of the primordial moon will change to orbit the primordial Earth.

3. Discussion

Movement speed inconsistency between material flow system is a kind of relative motion, the relative motion vortex nebula, vortex of original the moon change the direction of movement of material particles, due to the original quality centrifugal potential energy increases with the increasing of the moon with the original earth nebula separation^[6], the original and the original moon nebula surround earth with material for each other and each has its own, There's only so much material in the original moon's orbit. There is a strong interaction between the original mantle and the original crustal materials, which are continuous with each other. The original crustal materials all belong to the original earth, and the moon was formed earlier when the earth was not completely formed.

After the formation process of the solar system is clear, it is conducive to reveal the formation process of stars and galaxies. The real process of the formation of the universe has also been clear, and they have a common physical change law.

References

- [1] Joseph S.A New Analytic Approximation of Luminosity Distance in Cosmology Using the Parker–Sochacki Method[J].Universe, 2022, 8(6):300-300.
- [2] P. E B, E. M C, Taeho R, et al.Solar Evolution Models with a Central Black Hole[J].The Astrophysical Journal, 2023, 959.
- [3] Zhang Z, Pan Z.Strike-slip deformation and expansion process of the Qilian fold-and-thrust belt: Inferred from gravitational potential energy[J].Geological Journal, 2023, 58(12):4564-4575.
- [4] Physics; New Findings Reported from Lanzhou University Describe Advances in Physics (Novel Equal Area Law and Analytical Charge-electric Potential Criticality for Charged Anti-de Sitter Black Holes)[J].Journal of Technology Science, 2019.
- [5] Igor K.Molecular cloud collapse to stellar densities: models on moving geodesic vs. unstructured tetrahedron vs. nested meshes[J].Journal of Physics: Conference Series, 2021, 2028(1).
- [6] Yun Z L, Ruben K, Hsien S.Theory of Protostellar Disk Formation[J].Proceedings of the International Astronomical Union, 2015, 11(S315):118-125.

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