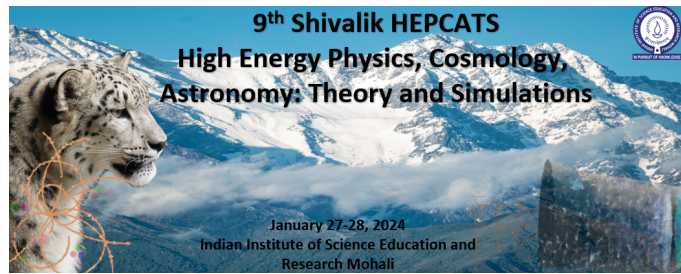


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Dark Matter:Initial Steps Decoded

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DARK MATTER: INITIAL STEPS DECODED

I think most of you all know much about dark matter ,but it's origin is still a mystery .

Do you believe that dark matter is formed due to stars or force present in atoms .The dark matter was formed during big bang. let me explain .

Did you ever know that a black hole mass M would exert same or identical gravitational pull as the star with mass M . Then how does the light that's produced at the core of the star, with mass M , will escape the gravitational pull from the centre but can't escape the gravitational pull of black hole with mass M but both exert same gravitational pull.

Now a doubt might arise that is any other force is interacting with black hole .Yes ,a external force is interacting that's dark matter ,and this dark matter weakly interacts with other matter but it can highly interact with the space fabric itself.

Let's learn how dark matter originates from scratch.

The force between nucleus of atom and electron gets stronger with increase in distance up to some extent[weak nuclear force].Few of galaxies exerted extra gravitational pull for the stars or that are far from the central black hole . Like force between nucleus and electron .

Now when a star capable of becoming black hole fuses hydrogen or other elements or other elements . Not only star capable of becoming black holes fuses elements ,but all stars fuses elements.(Example : hydrogen into helium)the heat and energy liberated in this process will escape in the form of light and heat ,but the force between nucleus and electron and nucleus and protons [weak and strong nuclear force] gets trapped in a star ,over time this force increases but is unable to react or interact, this energy is dark matter. All stars fuses the elements, and in every stars negligible amount of dark matter gets released per fusion and this dark matter never clumps because the process of clumping is continuously being disrupted by the energy released by the star. After the star dies the dark matter gets clumped because there is no energy to disrupt this process, in a star, that is large enough to create black hole[the larger stars fuses more Hydrogen elements resulting to the formation more dark matter ,but in small star less Hydrogen elements will be fused resulting to formation of less dark matter] the dark matter gets clumped and turns it into black hole, but in a star that is not enough large to create black hole the dark matter will be less so it turns into white dwarf star or will enter other phase like red giant. After a star ,that is larger enough to turn into black hole ,dies it turns into black hole with the help of dark matter and rules universe.

Another question might arise that if this is the case then how did the dark matter exist before the existence of stars this is because after few seconds of big bang the universe was soup of hot quarks and gluons later the neutrons ,electrons ,protons were formed and the weak and strong nuclear force got clumped forming dark matter

There is another proof for the existence of dark matter apart from the fast movement of stars that are far from black holes than expected and at that speed the stars reach escape velocity and should get thrown out from galaxies but they were fast as well as stable in galaxy [this was previously told but not with this details] second proof is gravitational lensing was stronger than expected [the expected was calculated using normal matter] but the gravitational lensing was stronger but all the mass of normal matter was correct yet gravitational lensing was stronger this proves both that something(dark matter)is disturbing the gravitational lensing and the existence of dark matter

Note: The proposed dark matter doesn't interact with the space fabric the way how massive objects interact and create gravitational waves instead they interact in different way which results in different information when we think it interacts in same way how massive bodies interacts due to which the information when measured may change .

Moreover dark matter is scale dependent which means it interacts in different way when dark matter is less and in different way when dark matter is more

ADDITIONAL INFORMATION:

One of the hypothesis about how the universe might end is "The Big Rip" hypothesis but it is fake because it states that the space fabric itself will tare or rips because the universe would have stretched so much that the fabric itself become into pieces, but the space fabric is stable at the infinitely dense points[black holes] so it means it can be stable even if it is stretched infinitely so big rip just can't occur

There is another hypothesis that if big rip occurs it will be conformed that the black holes are not infinitely dense because space fabric was stable near black holes.

So only one can be true,

Case 1

either space fabric can sustain and stable even if it is stretched infinitely or

Case 2

just the black holes are not infinitely dense hence the space fabric can be stable to that limited stretched and vulnerable to infinite stretched that causes Big Rip .So either space fabric can sustain the infinite stretch (Example black hole) or just black holes are not infinitely dense and in this case big rip can occur

There is one special case where black holes have infinite density which means all the energy is in infinitely dense point which is similar case in big bang which means it gives birth to a new big bang and acting like a portal or wormhole to that universe

Conclusion

In a star with mass M , light can escape from the core but in black hole with mass M light can't escape because dark matter interacts

The force between nucleus and electron will get trapped in star and become dark matter

This dark matter is highly reactive with space fabric .

This force later interacts with star after it's death and help in to become black hole

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