The Probable Evolution of Black Holes, Galactic Cores, & Quasars

Keith D. Foote
Ann Arbor, MI

This thesis develops a model of black holes, galactic cores, and quasars evolving over time, rather than simply appearing shortly or immediately after the theoretical Big Bang. It should be noted galactic cores and quasars 'are' black holes, given added definition by interaction with their surroundings. This model of evolving black holes does not support the Big Bang Theory, and suggests the concept of quasars popping into existence shortly after the theoretical Big Bang is a forced fit, lacking in any hard supporting evidence.

Black Holes (Extreme Gravity)

Black holes come in a variety of sizes. Small black holes are essentially undetectable, unless interacting with another star. It is theorized small, 'invisible' black holes are orbiting our own galactic core (a supermassive black hole) the same way star systems do.

In 1917, Karl Schwarzschild calculated any star compressed past a certain critical radius would become so dense, and the gravitational force so great, the star would become a black hole.[1] This theory is now being given credit, and is called the 'Schwarzschild radius.' The rounded, warped space above the black hole is called the 'event horizon.' The event horizon marks the region surrounding the black hole where nothing can escape. Light cannot escape because the thermons (joined electron/positrons, the medium transporting EM waves and, en masse, dark matter) are drawn in at the speed of light.

The Ultra-Space Field Theory[2] describes galactic cores as containing protons, which may (or may not) be combined with electrons to form a mass of pseudo-neutrons. Matter absorbed by a galactic core is compressed and broken down to its key components. These subfields are then absorbed and added to the black hole's mass, or expelled as shown by the electrons (and/or positrons?) exiting via the magnetic poles.

Supernovas (The Birth of Black Holes)

A supernova is an imploding star (not a mythical exploding star). The implosion, as seen from Earth, begins with an increase in brightness. The star will radiate light billions of times brighter than normal, then fade out slowly in a few weeks.

There are two 'basic' types of supernova, Type I and Type II. A Type I supernova results when old stars with a small amount of matter, such as white dwarfs, implode. Type I supernovas have been further broken down into Types Ia, Ib, and Ic.

Stars with large masses burn very rapidly and produce Type II supernovas. Once a star has spent its energy, it cannot provide a continuous outpouring of energy and matter to support its structure against gravity. It then ‘suddenly’ collapses in on itself, with the recoil ejecting of surface matter and closely orbiting gases outward.

Remaining in the center of the implosion is a compact remnant, which, depending on the amount of mass existing just prior to the supernova, may result in a dead star, a pulsar (neutron star), or a black hole.

Once a black hole is formed, it begins growing by gravitationally attracting all nearby matter, which includes other small black holes, neutron stars, dead stars, living stars, and anything else that isn’t in a stable orbit or too far away to be drawn in.

Neutron Stars (What Are They Good For? Black Hole Food!)
In 1934, Fritz Zwicky and Walter Baade theorized a supernova implosion would leave a star-like remnant, consisting largely of neutrons.[3] The supernova of 1054 has been used as evidence supporting their theory. A pulsar exists where the supernova implosion took place. (Please note- in 1934, free neutrons were still considered stable, fundamental entities. The model developed may be flawed.) It is unknown whether neutron stars are actually made up solely of neutrons. The USF Theory describes the protons and neutrons at an atom’s core as pseudo-neutrons and predicts neutron stars are a balanced mix of electrons and protons, or pseudo-neutrons.

Neutron stars are extremely small, with a radius of approximately 10 km (6 miles), and considered to be very dense. Pulsars are generally accepted to be young neutron stars, emitting short bursts of radio waves due to a high rotation speed. This rotation slows over time, reducing the number emissions and making the ‘neutron’ star difficult to detect.

A few neutron stars are partners in binary systems. The orbital interaction with another star makes it possible to identify them and estimate the strength of the neutron star’s gravity field. Most of these partnered neutron stars have a gravitational strength of 1.4 to 1.8 solar masses.

Stellar and Supermassive Black Holes

'Supermassive' black holes typically range from millions to billions of solar masses. The more common 'stellar' black holes, created by the gravitational collapse of massive stars, are much smaller, ranging from 3 to a 1000 solar masses. Supermassive black holes typically act as galactic cores, while the smaller black holes maintain an orbit around them. **This model of evolution suggests supermassive black holes are the result of hundreds of billions of years of gradually accumulated matter.**

Galactic Cores

Galactic cores, in this model, are the result of black holes which have accumulated so much matter they can support the orbits of thousands of star systems. Galactic cores provide an excellent example of a large scale gravity field and the characteristics of gravity. In 1983, Alan Dressler accidentally discovered a massive black hole in the center of the Andromeda Galaxy.[4] Our own galactic core (the black hole in the center of the Milky Way) is estimated to be 2000 light years wide. Prior to 1983, it was generally assumed every galaxy orbited around an empty center radiating infrared light.

Until very recently there had been doubts every galaxy had a black hole at its center. A curious assumption had suggested only galaxies with bulging cores could contain supermassive black holes. (This is an obvious 'clinging leftover' from when we thought all galaxies orbited around an empty hole.) This assumption was proven wrong after Alex Filippenko, with the University of California, and Luis Ho, with the Observatories of the Carnegie Institution of Washington, discovered a relatively small supermassive black hole at the center of galaxy NGC 4395.[5] "The supermassive black hole in NGC 4395 is the smallest one yet found in the center of a galaxy," Filippenko said. "This would be consistent with the galaxy having a small bulge. However, the bulge is not just small, it seems to be nonexistent."

It has been known for several years NGC 4395 emits visible light and X rays from its core region. This is normally a clue signaling the presence of a giant black hole actively drawing in matter to create an accretion disk. But, because of its small size and the assumption of a central bulge requirement, it was previously overlooked.

Galactic cores display field characteristics. They have an intense gravity field. They are surrounded by an area radiating infrared light. They have north and south magnetic poles, as shown by the massive jets of electrons shooting out from each pole. (It is generally assumed positrons are not involved in this process.)

The stars and star systems around galactic cores tend to move into orbits perpendicular to the poles, or into equatorial orbits. The size of galactic cores and their surrounding galaxies are proportional. The larger the galactic core, the larger its surrounding galaxy. The orbital speed of a galaxy's outer stars is determined by the size of its galactic core.

<u>Quasars (*Bright Lights, Bright Lights!*)</u>

Quasars are the most luminous objects in the known universe. A few are thousands of times brighter than our entire galaxy. Some quasars vary the intensity of their light every few minutes and are believed to be rotating at incredible speeds.

Quasars, as 'evolved ultra-massive black holes', would change assumptions about the age of the universe and weaken arguments supporting an expanding universe. Advocates of an expanding universe are opposed to this concept. (The current popular theory describes quasars as very early stage black holes created immediately after the Big Bang.)

Most quasars are estimated to be more distant than any known galaxy, and because of their brightness, cannot be considered stars. Quasars radiate radio waves, visible light, gamma rays, and X rays, with variations in the amounts of each form of radiation. For example, a small number of quasars give off most of their energy as gamma radiation. Quasars also emit EM waves in pulses. The length of time between pulses varies with each quasar and with the type of EM wave. The time between pulsed radio wave emissions can span from months to years. The space between pulses for visible light is usually a matter of days. X-ray emissions are given off every few hours.

A number of quasars have been observed ejecting what appears to be gas from their poles. The ejected gas extends thousands of light years outward.

In March, 2003, George Chartas and a team of researchers discovered evidence of high speed winds blowing away enormous amounts of gas from the cores of two different quasar galaxies.[6] Their observations revealed these galactic winds, traveling at about 40% the speed of light, contain oxygen, carbon, and iron. It should be noted quasars are the only ‘known’ source of elements heavier than helium. **The galactic winds from quasars provide a source of heavy elements, which earlier theories presumed could only be created by the internal fusion of stars (which were then suppose to explode, not implode). It is possible quasars are the primary source of heavy elements.**

This discovery weakens arguments supporting the current Standard Model of the interior of stars as the source of elements more complex than hydrogen and helium. The current standard model provides no means of releasing heavy elements from the star’s core after it implodes.

The concept of quasars as extremely evolved forms of black holes should be considered. The combined matter of hundreds of stellar and supermassive black holes, would develop incredibly intense magnetic fields. At the scale of quasars, magnetic fields may be strong enough to overcome gravity, causing the ejection of complex ions from its poles. **It is understood the time required for a small black hole to evolve into a quasar would destroy current estimates of the universe’s age.**

‘Where’ Did the Big Bang Happen?
There is no evidence suggesting our galaxy, and nearby galaxies, are moving away from an earlier explosion. All observations show a uniform redshifting based on distance from Terra. Two feeble analogies have been used as an explanation for this. One is the expanding balloon analogy, which doesn't work very well because the galaxies are all stretching on the surface of the balloon, and moving outward from the center of the balloon. The other is the expanding raisin bread model, which at least doesn't have the galaxies expanding, but still has the raises/galaxies moving away from a central location within the bread. The idea of Terra being the center of the the Big Bang seems highly improbable and has only the misinterpretation of redshifting light as a supporting argument.

Ancient Quasars
On June 29, 2011, the discovery of a quasar named ULAS J1120+0641 was announced.[7] It was determined, per redshift, to be 12.9 billion years light years away, suggesting it was at this stage of development 770 million years after the Big Bang. Does it seem at all possible a mature ultra-massive black hole could form in 770 million years? Our own star, Sol, is considered to be 4.6 billion years old, with

a projected lifespan of 10 billion, total. We are asked to believe that ultra-massive black holes (quasars) were created during the Big Bang, or immediately thereafter. There is no supporting evidence for this assumption, other than it fits with the 'supposed' age of the universe. (It's right up there with the speed of light being the constant and time being the variable in Einstein's Special Theory of Relativity.)

Huge Large Quasar Group

On January 11, 2013, it was announced astronomers had discovered the largest known structure in the universe, a clump of active galactic cores stretching 4 billion light-years from end to end.[8] The structure, called a huge large quasar group (H-LQG), is a group of 73 quasars. The structure is so large it should not exist and creates significant problems for the Big Bang model and the age of the universe. "While it is difficult to fathom the scale of this LQG, we can say quite definitely it is the largest structure ever seen in the entire universe," lead author Roger Clowes, of the University of Central Lancashire in England, stated. "This is hugely exciting, not least because it runs counter to our current understanding of the scale of the universe."

When Will Academics Drop (Or At least Question) The Big Bang Model?

When the Faith-Based Believers die off, or evolve. And as we discover more and more quasars at distances greater than than 13 billion light years away. However, don’t be surprised if the age of the universe gets readjusted to support new guesstimates on when the Big bang happened.

In Summation

A large star implodes, leaving behind a small black hole. Gradually, over hundreds of billions of years, it evolves into a supermassive black hole, and takes on the role of a galactic core. More time passes, and it evolves into a quasar, an ultra-massive black hole capable of being seen (with high powered telescopes) at distances of 13 billion light years, and greater.

References

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