Plasma State inside of the Super Massive Kerr Black Hole and Problem of the Gravitational Wave Source

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1.Introduction
The motivation of the present studies has been raised by results of the related studies on Sgr A,at the center of our Galaxy, which is concluded to consist of super massive binary system whose member Kerr black holes (BH) have masses of 2.27 million and 1.94 million solar mass, orbiting with a period of 2200 sec. To accept the existence of this binary system we are required to consider a possible model, for the inside of the Kerr black hole, which prevent the propagation of the gravitational waves.
2.Relation between the Event Horizon(EH) and Distribution Limit of the Material(ML)
Though there is basic difference between EH and ML, no clear separation could be discussed in current theory of the gravitational waves from BH. We propose, however in the present study, the significance of the quasi vacuum space ,existing between EH and ML inside of Kerr black hole, that is formed by condensation of the distribution of high energy plasma inside EH by keeping the same rotation parameter a(=J/Mc for angular momentum J, Mass M, and the light velocity c) for the state EH>ML, as if EH=ML.
3.Condensation Mechanism and a Model of Plasma Distribution within ML
Condensation of plasma inside of EH is caused basically by the gravity for which we can find equilibrium state by centrifugal force and pressure gradient of high energy plasma. To keep the rotation parameter to be a constant value in the process of diminishing ML, the role of Lorentz factor that appears in angular momentum of the moving particles in plasma with velocity close to the light velocity has essential significance. We evaluate the equilibrium in a frame of local Minkowsky space time which can be found inside of the moving plasma which consists of two components; the first component has number density Nb (N:total number density, b: fractional coefficient) where element plasma particles rotate around a common axis with velocity c((1-e)^(1/2)) (e: fractional coefficient with condition e <<1) and the second component has number density N(1-b) with spherical shell like velocity distribution centered around cz (z: fractional coefficient 1>z).
4.Example of the Calculated Plasma Distribution Based on the Model within ML
For the case, of 2 million solar mass Kerr black hole, that is interested in the present study, we have calculated ML that shows 1/6 of EH as an example. For this case where EH is 2.97x10^11 cm, plasma density ,Lo; plasma number density, and mean distance d becomes Lo=3.66x10^4 g/cc, N=2.29x10^28 /cc, and d=3.52x10^(-10) cm, respectively, when we assume EH=ML. When we consider ML=(1/6)EH, however, it follows that the inside plasmas are confined within a spherical shell zone close to ML with thickness of 0.15ML; the most dense case of parameters, in this case, show that Lo=8.16x10^9 g/cc; N=5.10x10^33 /cc . The mean separation distance of ions becomes to be 5.81x10(-12) cm, for this case, which approaches to the quantum physical radius of proton, 10^(-13) cm.
5.Propagation of the Gravitational Waves and Their EH Encounter
The gravitational waves generated by accelerated motions of material region inside ML propagate in space time range between ML and EH which has 6 times wider than source range. It has been confirmed by our previous work (1) that the velocity of gravitational waves that approach the event horizon becomes zero.
6.Discussion
Observation evidences which oppose to the results of present study are reports of LIGO that show many cases of merger of the black hole binary. There are however possibilities of discussion because their

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conclusion of sources for observed gravitational waves as merger of star mass black hole binaries is based on the theories, of the generation of the gravitational waves, which have not considered effect of the event horizon on the propagating gravitational waves.
(1) https://www.terrapub.co.jp/e-library/9784887041714/index.html

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