The observed evidence of both invalidating black hole model at the galactic center and magnetic monopole existence

According to an abnormally strong radial magnetic field near the GC detected in 2013, we first demonstrate that the radiations observed from the region neighbor of the Galactic Center (GC) is hardly emitted by the gas of accretion disk which is prevented from approaching to the GC by the abnormally strong radial magnetic field. These radiations can’t be produced by the black hole at the Center. Secondly, we demonstrate that the abnormally strong radial magnetic field near the GC discovered in 2013 is hardly produced by the $\alpha$-turbulence dynamo mechanism which is the known most effective dynamo mechanism up to now. The dilemmas of both the black hole model at the GC and the discovery that very strong radial magnetic field in the neighbor of the GC are naturally solved in our model of supermassive object with magnetic monopoles (SMOMM) proposed by Peng and Chou at 2001, in which five predictions had been proposed. Three of these predictions are quantitatively confirmed by later astronomical observations. Thus, we believe that the discovery of abnormally strong radial magnetic field near the GC is probably just the astronomical observational evidence for magnetic monopole existence which is predicted in particle physics. The Conclusions of the paper are: 1) It could be an astronomical observational evidence of the existence of magnetic monopoles which it predicted in particle physics. 2) The black hole model of the GC is invalid. 3) The radiations emitted from the region near the GC may be naturally explained by our model and then our model containing magnetic monopoles could be a reasonable one.

Biography

Qiuhe Peng is mainly engaged in Nuclear Astrophysics, Particle Astrophysics and Galactic Astronomy research. In the field of Nuclear Astrophysics, his research project involved a neutron star (pulsar), the supernova explosion mechanism and the thermonuclear reaction inside the star, the synthesis of heavy elements and interstellar radioactive element such as the origin of celestial 26Al. In addition, through his lectures, he establishes Nuclear Astrophysics research in China. He was invited by Peking University, by Tsinghua University (both in Beijing and in Taiwan) and by Nuclear Physics institutes in Beijing, Shanghai, Lanzhou to give lectures on Nuclear Astrophysics for many times. He has participated in the international academic conferences over 40 times and he visited more than 20 countries. In 1994, he visited eight institutes in USA to give lectures. He is the first Chinese Astrophysicist to visit NASA and to give a lecture on the topic, “Nuclear Synthesis of Interstellar 26Al”. In 2005, he visited USA twice and gave lectures in eight universities again. Inviting six Astronomers of USA to give series lectures, he has hosted four consecutive terms summer school on gravitational wave astronomy. After the four-summer school obvious effect, at least 20 young scholars in China in the field of gravitational wave astronomy specialized in learning and research. 220 research papers by him have been published.

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