Preliminary Evidence Points to The Possible Existence of A Ninth Planet

A study published by two astronomers from CalTech has shown some tangential evidence that could mean the existence of a ninth planet in our Solar System. Michael Brown and Konstantin Batygin, the two authors who submitted the journal article, estimated the mass of the hypothetical planet as about 5 to 10 times that of the Earth. The diameter of this “Planet Nine” might be 2 to 4 times that of the Earth. The planet was not observed directly, but its postulated existence was inferred with the movement of a number of other recently discovered Kuiper Belt Objects (KBOs) in the outer solar system. These objects have been shown to have clustered in a common perihelion. This orbital alignment of these objects could be explained by a distant, eccentric, and massive planet. This planet, if it exists, would occupy the same plane of orbit as those of the distant Kuiper Belt Objects, but with a perihelion that is 180° away from that of the previously mentioned KBOs. Furthermore, the existence of such planet would explain the orbits of Sedna-like objects.

Many claims were made in the past about evidence that pointed to the ninth planet. It is likely that you would question the postulation as well. However, Brown, one of the authors of this article said: “Why is this different? This is different because this time we’re right.” (source: Washington Post, Astronomical Journal)

The Merging of Two Stars Heads to Likely Violent End

Astronomers at European Southern Observatory have used Very Large Telescope to find a pair of “touching” stars, called VFTS 352, that are the most massive and hottest to date. It is speculated that the duo will either form a single giant star or a binary black hole. The process will most likely be dramatically violent. The pair was found to be about 160,000 light-years away in Tarantula Nebula, where new stars are actively being formed in this remote location of the universe. These two stars are big, yet close. They are only separated by 7.5 million miles. The proximity of the two stars gave rise to a bridging connection, which has led to material exchange. The combined mass is about 57 times that of the sun. Because the two stars have similar mass, materials are merely shared, rather than sucked, from one to another. There two likely outcomes of this tangling duo: a merging into a singular star, or a pair of black holes. The singular star will likely be in rapid rotation as the angular momentum of the pairings stars are conserved. A long-duration gamma-ray burst is likely to happen during the process. However, if the two stars are mixed well enough, they may both remain compact and avoid merging. When reaching the end of life cycles, both of these stars will evolve into black holes. A pair of black holes will be an intense source of the gravitational wave. (source: eso.org)