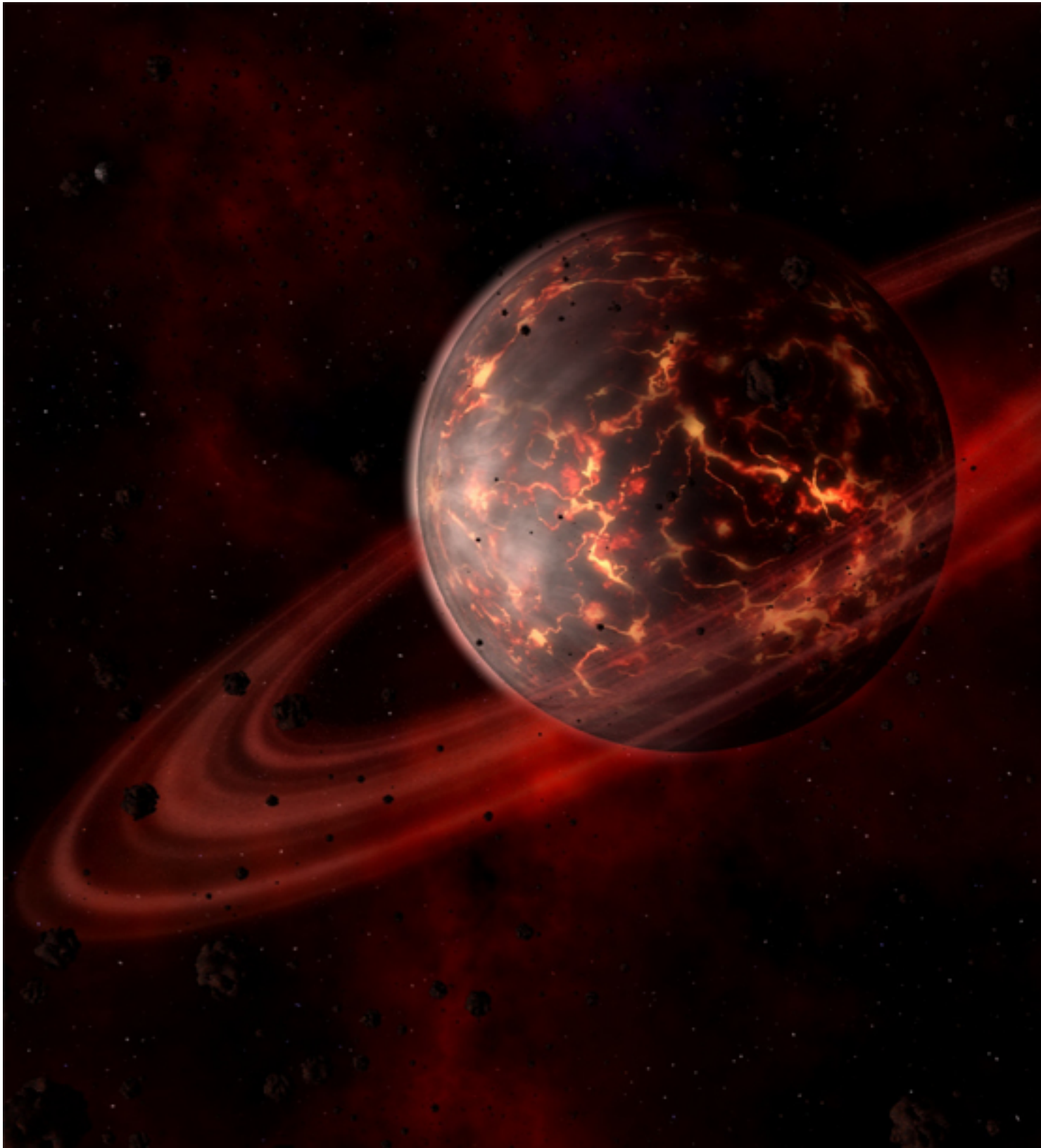




On 20th January 2016, two American astronomers made an extraordinary claim - they had found evidence for a ninth planet in our solar system, a planet 20 times further out than Neptune which would take up to 20,000 years to orbit the sun. It is a discovery that could completely rewrite our understanding of our solar system and how it formed. As the world's biggest telescopes start scanning the skies searching for Planet 9, the Sky at Night team investigates. If Planet 9 exists, where is it and where did it come from? In California, Chris Lintott meets the astronomers whose study of the distant Kuiper Belt led them to predict the existence of the planet. And while some scientists are still sceptical, Maggie Aderin-Pocock discovers how our models of the formation of the solar system and the discovery of similar exoplanets around other stars all support the existence of Planet 9.

Planet Nine is a hypothetical large planet in the far outer Solar System, whose presence would explain the unusual orbital configuration of a group of trans-Neptunian objects (TNOs) that orbit mostly beyond the Kuiper belt. The hypothesis first took form in a 2014 letter to the journal Nature by astronomers Chad Trujillo and Scott S. Sheppard, who had inferred the possible existence of a massive planet from similarities in the orbits of the distant trans-Neptunian objects Sedna and 2012 VP113. On 20 January 2016, researchers Konstantin Batygin and Michael E. Brown at Caltech argued that a massive outer planet would be the

likeliest explanation for the similarities in orbits of six distant objects. The predicted planet would be a super-Earth, with an estimated mass of about 10 times that of Earth (approximately 5,000 times the mass of Pluto), a diameter two to four times that of Earth, and a highly elliptical orbit that is so far away that it could take around 15,000 years to orbit the Sun.



On the basis of models of planet formation that might include planetary migration from the inner Solar System, such as the

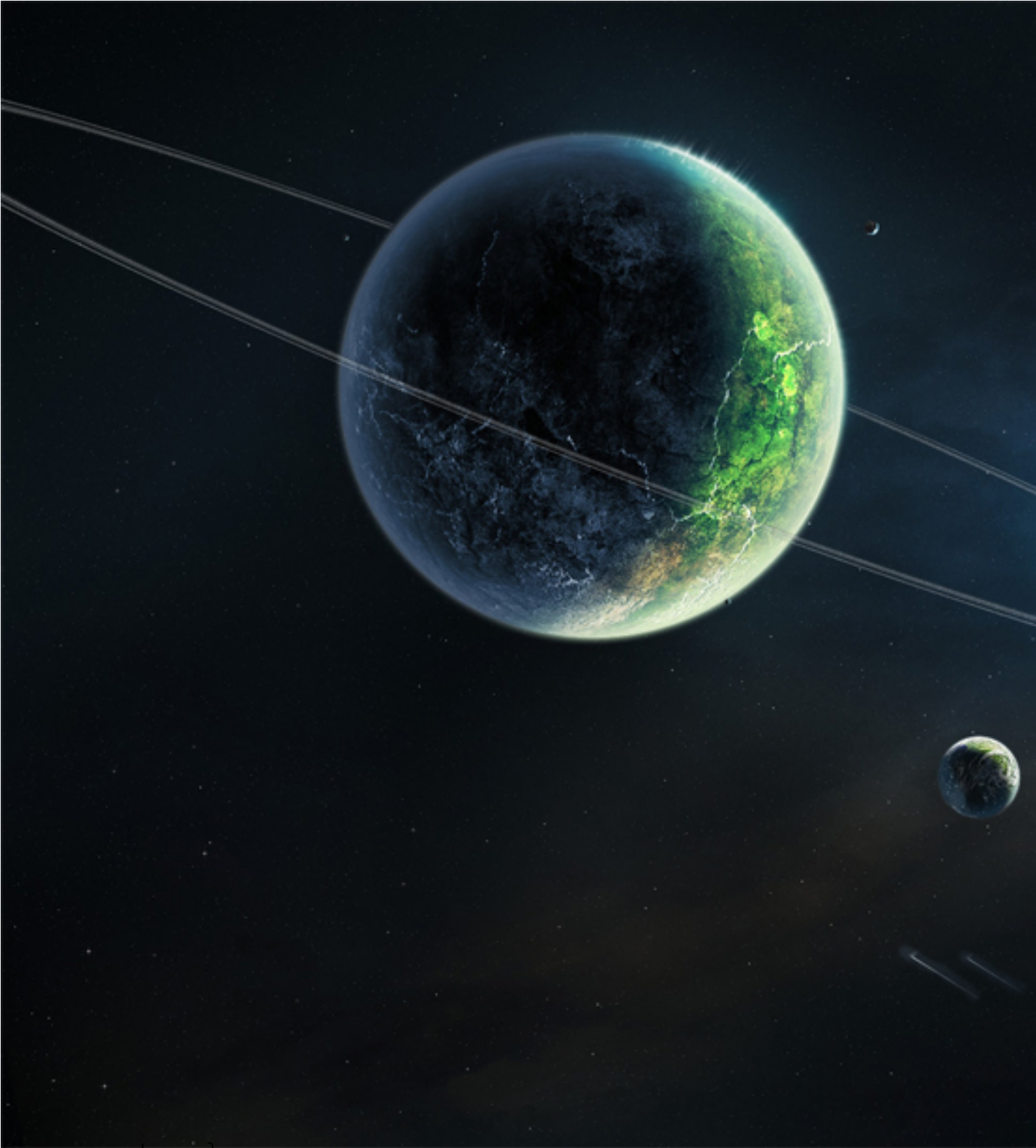
fifth giant planet hypothesis, the authors suggest that it may be a primordial giant planet core that was ejected from its original orbit during the nebular epoch of the Solar System's evolution.

From Wikipedia, the free encyclopedia

เขียนโดย Administrator

วันเสาร์ที่ 09 เมษายน 2016 เวลา 04:42 น. - แก้ไขล่าสุด วันเสาร์ที่ 09 เมษายน 2016 เวลา 04:50 น.

---



{comments on}