Reaction paper



Reaction to the lecture: Dr. Michael Brown's illuminating lecture on new explorations in the outer solar system has really captured my imagination. His interesting and humor-filled account of the discovery of 'Eris' - a planetlike object orbiting the sun in an extremely elliptical pattern – has been a pleasure to listen to. In the lecture, Brown talks of how Eris is a conundrum to astronomers, for it displays characteristics of both a planet and an asteroid. Similar in size to that of Pluto, possessing a proper spherical shape and majorly comprised of rock, it qualifies to be a planet. On the other hand, its placement within the Kyper belt makes it part of other debris floating in this space. Its long distance away from Sun and the estimated 560 year orbiting time, also demarcates it from the eight well-established planets. Fascinated I was with Dr. Brown's free-flowing narrative of the events in the lead-up to the eventual discovery, I was also impressed by his mastery of scientific technique and methodology. The way he explained how digital cameras and high-power telescope were used for the project was guite lucid. Toward the end of the lecture, Dr. Brown expressed his displeasure about the tendency among the community of astronomers to give importance to precise definitions of what a planet is. As per the newly coined definition of a planet, both Eris and Pluto do not qualify, thereby leaving the number of recognized solar planets to be eight (stopping with Neptune). Upon hearing this decision to drop Pluto and Eris from the class of planets, I was a tad disappointed. But as Dr. Brown explains at length, such rigid formalizations go against the spirit of astronomy and cosmology. I agree with his view that it is the concept and description which matters, not narrow definitions. Lecture Notes: Lecture organized by Astronomical society - Dr. Michael Brown was the speaker - Issues covered include definition of our planet,

Bodies at the edge of solar system - Beyond Neptune - the lecture topic interestingly titled How I killed Pluto and Why It Had It Coming – (funny trivia) Dr. Brown was voted in Top 10 sexiest geeks in a science magazine -Discovery of Pluto in 1935 - Planet x was the project Dr. Brown undertook -Neptune was erstwhile the most distant planet - but moving objects beyond this space spurred interest - Pluto was no uranium cored as was previously speculated - It was discovered in 1992 that Pluto was indeed part of the kyper belt consisting of hundreds of other orbiting objects - Till 2002, it was still termed a planet although it was seen as part of the kyper belt - Dr. Brown's exploration used automated computers - these were used to take seguential photographs of the space using a powerful telescope and a digital camera - Later these pictures would be compared to find moving objects this is how Eris was discovered - at first the size of Eris was thought to be much bigger than Pluto - but recently, it is estimated to be approximately the same size as that of Pluto - Eris, though is much further than Pluto nearly three times distant than Pluto from Sun - the whole issue of nomenclature and whether Eris is indeed a planet – how the community of astronomers defined and stipulated the qualities of a planet - how Pluto and Eris thus lost their status as planets - and finally, as Dr. Brown explains, how such definitions should not really matter - Q&A session. Reference: Dr. Michael Brown, How I Killed Pluto and Why It Had It Coming, audio version of lecture retrieved from http://www. astrosociety.

org/education/podcast/brown. mp3, on 3rd May, 2011