

Top 8 Difficult Topics

Though the types of questions visitors ask vary widely in content and degree of difficulty, the most difficult topics that astronomers who do public outreach face generally fall into these eight categories. As outlined in the video, when talking to a group, it is not recommended to discuss or refute any claims that are related to these topics. Some visitors have strongly held view that they wish to express and you are unlikely to change those views. Instead use techniques shown in the video.

1. Moon Hoax

The claim: Humans have never landed on the Moon, the Apollo landings were faked by NASA.

The reasons: The flag flapping on the surface of the moon, the contrast between the fantastic pictures taken by the astronauts and the horrible quality of the video of them moon walking, the astronauts should have received heavy doses of solar radiation yet none have cancer, “misplaced” shadows in photographs, etc.

2. Mars Myths

The claim: At some time during the year Mars is going to be the size of the moon in the sky

The reasons: Most receive an email from what they believe is a reputable source

3. Astrology

The claim: Astrology is the same as Astronomy

The reasons: Many people confuse astronomy with astrology and may ask you specific questions that relate to astrology. Astrology is a collection of beliefs and practices based upon the positions of the sun, stars, and planets while astronomy is the study of all objects in the sky.

4. UFO's/Aliens/Crop Circles

The claim: “I have seen a UFO” or “I have been abducted by aliens”.

The reasons: There is often not much proof with these claims. Some people bring up crop circles or have pictures of fuzzy smudges.

5. 2012

The claim: In 2012 disaster will strike the Earth.

The reasons: The main reason for this claim is that the Mayan calendar stops on December 21, 2012.

6. Creation Stories

The claim: Origins of the universe, Earth, and life by other means than what scientific evidence shows

The reasons: These are questions of faith and/or traditional beliefs or teachings.

7. Planet-Related Topics

The claim: Planet X exists or planetary alignments¹

The reasons: Some feel that there must be some large object out there that keeps all the other planets in their orbits. There is much speculation surrounding things that happen when the planets align.

8. Personal Hypothesis

The claim: I have a hypothesis that better explains the nature of physics.

The reasons: There are some well read hobbyists who believe that they have hypotheses that provide plausible explanations for subjects such as dark energy, dark matter, origins of the universe and others. They may have pamphlets/books that describe their hypotheses.

¹ Another common claim that falls into this topic is the discussion of Pluto. The discussion of what is considered a planet and what is not considered a planet can be a great teaching tool. However sometimes members of the public only want to argue semantics.