

Research a Topic of Science related to the movie Interstellar

Include in your presentation the following

a. Description of research – What is it? What are the main ideas associated with it? Is this object/technology/concept feasible? Does it apply to us today at all? Is this being studied? Who discovered/conceived of it? Include questions that you have about this topic.

b. A visual, animation, video clip (not from Interstellar), 3D model, etc

Find the interesting things about your topic

Topics

1. Wormhole – their existence, journey through one
2. Black hole – usual depiction; the disk around it; are there planets near them?; traveling through one
3. Gravitational lensing – in movie it is related to the area around the black hole
4. Time dilation – is it real, how does it work, is it constant
5. Artificial Gravity - Simulating Earth's gravity on spaceships, spaceflights – is it possible or only theoretical; designs?
6. Frozen clouds - on planets or in their atmospheres; what are the atmospheres of other planets or exoplanets like?
7. Exoplanets – planets around other stars (not our solar system); what are they like? Are there a lot?
8. Dimensions – 4, 5, 6 dimensions; Branes & Bulk
9. Women & Minorities in Science – what is the current status; research on the subject
10. Quantum mechanics – what is it? How does it affect us? The behavior of subatomic particles do not resemble normal objects at our scale; Particles have limited predictable properties – there is always uncertainty involved: Not every position is available, can only be described in terms of probabilities; not every energy available;
11. Relativity – 2 kinds: general relativity and special relativity in a nutshell – together they say the basic rules of physics don't apply when traveling near the speed of light or under the influence of tremendous gravity; what does this look like?

12. Space Travel – how feasible is it? What have we be able to do? What are we planning or dreaming?