

How is Astronomy presented in film?



By Raaghav Das and Aarav Mangla
Westminster School (KAPW)

Introduction

Modern media has presented astronomy in a way which is very appealing to many people. However, is this perceived view the correct view? We have set out to 'debunk' these two classic, sci-fi cult classics in order to show how the wonders of the universe are more complicated than we could ever imagine.

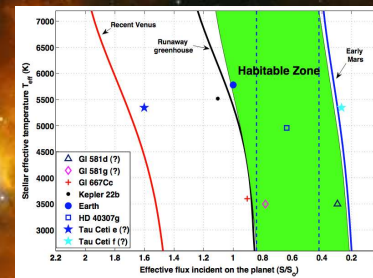
Abstract

This poster aims to show that the many exciting possibilities shown in the films *Star Wars* and *Interstellar* are, in reality, quite far from the truth. The biggest problem with the former is the lack of thought gone into the physics of space. The main issue explored in *Interstellar* is the idea of a planet orbiting a black hole and allowing a human to survive at all.



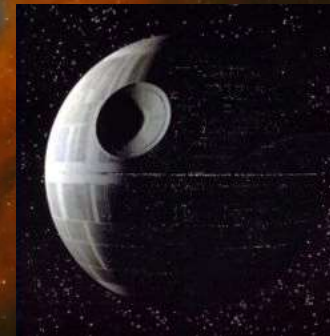
What's wrong with *Interstellar*:

- A planet cannot be habitable and even slightly hospitable so close a black hole, due to the extreme radiations such as gamma and x-rays.
- In addition to this, the black hole would have to be 163 million solar masses, revolving at less than a 100 millionth of a percent shy of the speed of light to allow inhabitants to receive enough light (and not be sucked in by the black hole)
- The space around the black hole should be almost empty, otherwise any stray matter being sucked into the black hole would have emit a strong blast of radiation, killing any nearby life.



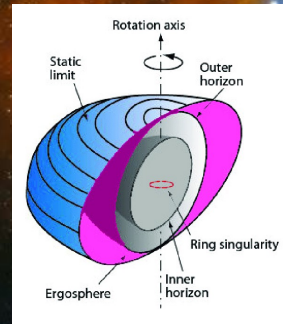
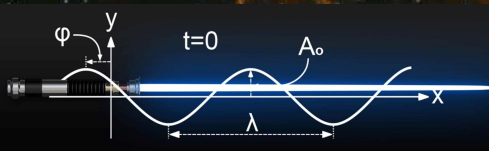
Conclusion

In conclusion, it is clear that space and astronomy, as presented in film, is actually far from the truth. While this may disappoint some, the truth remains that our universe is vast and unexplored, and in some cases the real truth may be even more interesting than what has been shown in a film.



Aims

The most important aim of this poster is to show people that film does not accurately present space and astronomy. Our hope is to interest more people in the real study of our universe, allowing a new generation of astronomers to help uncover our past and pave our future.



What's wrong with *Star Wars*?

- Space is a vacuum, meaning it has almost no particles. Due to this, no sound can travel in space, and there can be no fire on account of a lack of oxygen for combustion. Thus, all space battles would be silent and there could be no explosions- the Alderaan explosion would have been much more low-key!
- There's no gravity in space. Hence, it is impossible for X-Wings and Ti-fighters to fall or even turn without complex maneuvers!
- All the guns in *Star Wars* should not make a sound- lasers made of light should not make sound when shot from a gun, whether in space or on land!
- A 'parsec' is in fact not a measure of time, but of distance – to be exact, it is 3.26 light years

Acknowledgements:

Screen Rant	Ranker
Vocal Media	Time
Wikipedia	Britannica
Science.org	Robb Phoenix
ScienceAlert	ResearchGate
Astrobites	Medium
Interstellar	Star Wars

