



END OF THE WORLD: A PROJECT TO LEARN SCIENCE AND THINK ABOUT THE FUTURE

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Abstract

The project consists of presenting possible causes for the end world related to the content of physics as: Stellar explosion, Global cooling, the sun, Asteroids, Global warming, Nuclear War and Inversion of magnetic poles. Questions about physical theories present in the phenomenon, term to occur, and curiosities will be discussed. Subsequently other phenomena that are not directly linked to the area of physics will be quickly presented as Extinction of the bees, Alien invasion etc. For completeness, we elaborate a game about the end of the world for a better understanding and understanding of the subject. In this way, the main purpose of the project is to use the theme "end of the world" as something flashy and able to attract the attention of students, so that through a creative game they can acquire knowledge about Physics and unveil some myths that lay knowledge leads the population to acquire.

Introduction

From ancient times, humanity has sought the understanding of natural phenomena, becoming a fascinating search for the unknown. Scientific evolution enabled man to obtain explanations for the development of laws that govern the universe. In this context, it was possible to understand the ecosystem its origin and possible evolution of the Planet Earth, identifying natural systems that undergo variations with the passage of time, causing impact on terrestrial life, becoming possible causes for the end of the world.

Inspired by the project of a British foundation, Future of Humanity institute (FHI) dedicated to this subject at Oxford University; we will hold a brief workshop. We have developed a collection of materials (posters, video compilations, a game and a dynamic) in order to bring to the center of attention the main concepts of Physics that can help us to understand the evolution of the planet and also, what can finally, humanity. We understand that this topic has the potential to attract the interest of different

audiences. The main physical phenomena were surveyed, accounting for seven to the total, such as Global Warming, Asteroids and the Sun among others that have relevance to understand the cosmic evolution of our Planet.

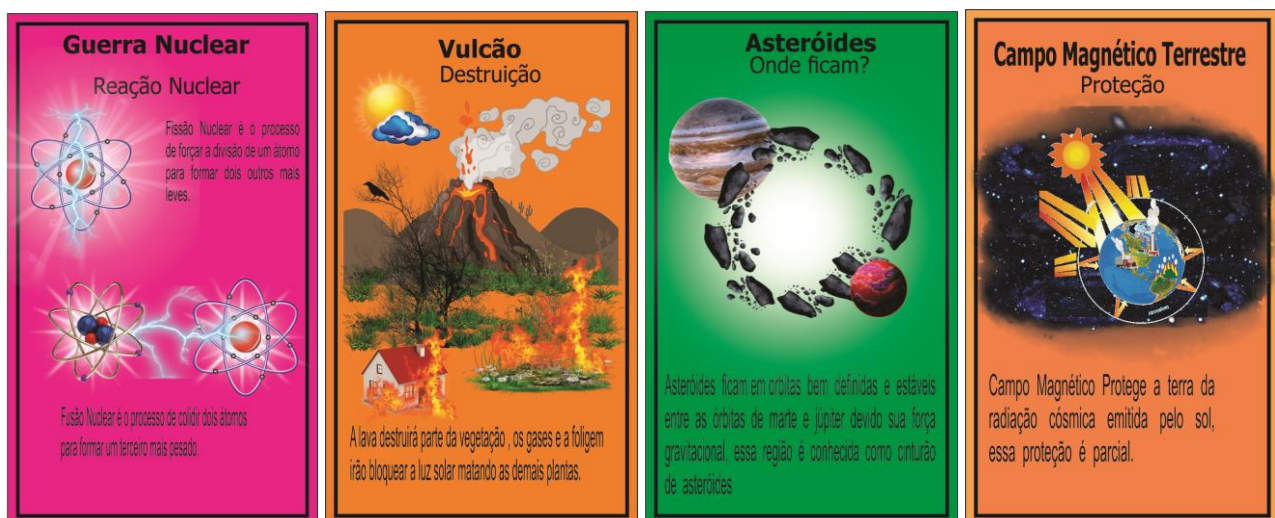
In this way, we seek to reflect on the future of life on Earth in such a way that the public can understand such phenomena. During the presentation will be exposed theories of classical mechanics, electromagnetism, modern physics among others, being this the theoretical basis for reflection of the physical concept that the phenomenon relates.

Materials and Methods

For the assembly of the banners of apprehension we searched several articles / magazines and selected the themes that had the greatest characteristics in the area of Physics for the possible causes of the "end of the world". In order to obtain a better accuracy of the data informed, we search in reliable sites several images that refer to the proposed theme, after obtaining, we use Corel Draw software for image configurations and conceptual writing modeling. In the second stage, we cut pieces of videos pertinent to the theme of the television series cosmos presented by the physicist and presenter Neil de Grasse Tyson to assist in the presentations. Later we developed a game using as reference the game Star Wars - Episode VII also using the software Corel Draw for development of the conceptual arts. They were bought 10 supports for banners and finally the arts (Banners and letters), were printed with the purpose of disseminating knowledge in public schools and community.

Results and Discussion

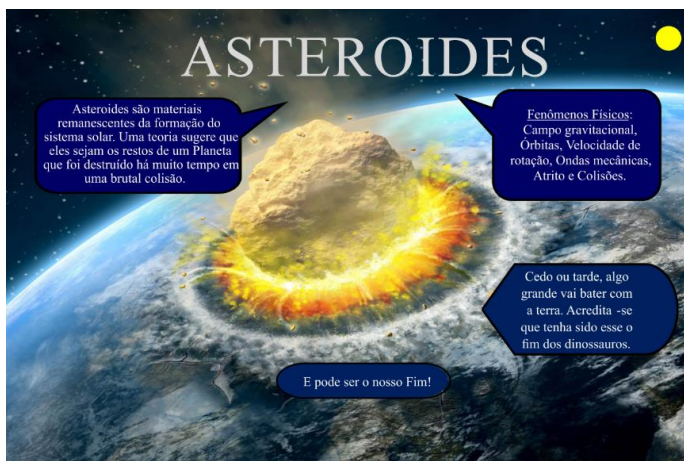
The letters were developed with several examples representing the causes for the end of the world. Next is represented only a few phenomena.





The game has a set of 8 physical phenomena, divided into 4 cards, adding 32 card items, there are also 2 special cards "God Particle" that replaces any of the cards in the set. This adds 34 items. For the game to stay more dynamic has been added cards effects that give fun "competition" features to the game in total 22 card effects. Win the game the participant who obtains 3 complete sets, remembering that all are winners, because sometimes you win. Sometimes you learn.

The banners were developed as shown below:



The banners were captioned according to the risk that our planet can be extinguished due to some of the phenomena presented. The intention of the banners was that we could have a mobile project to take in the schools to carry out workshops with the students.

Conclusions

All selected scenes proved to be adequate as a didactic resource for experimental physics classes. Outdoor activities open the possibility of interlocution between high school disciplines with emphasis on Physics Education, in addition to associating Physics with daily activities.

References

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