

## Cinema and Physics: How the Discoveries in Physics Led to Breakthrough in Cinema

Cinema and Physics are two very intertwined fields: the discoveries in physics opened new and more exciting avenues for cinema. In return, cinema is a vehicle used by scientists to make science, and physics in particular more accessible. These two fields have supported one another in terms of new inventions and advertisements. Through the creation of scientific inventions, cinema has grown from the use of the Cinematograph into the modern DSLR cameras. On the other hand, televisions have served as a way of scientific advertisement due to its documentaries and live talks so its knowledge could be spread across the country. By analyzing particular eras and historical events, scientific breakthroughs had a direct impact on the growth of cinematic films. During the Great Depression when production was slow and economic times were hard, these fields had a difficult time progressing themselves. On the other hand, some of these scientific discoveries such as the use of acoustics in theatrical buildings and the creation of sound in films had created beneficial performance in the world of cinema. The discoveries in acoustics, radio and telegraph are related to the first movie with sound, after decades of silent films. Following the discoveries of the cathodic tube, and the award of the Nobel Prize for photoelectric effect to Albert Einstein, the black-white television appeared and was accessible to a larger and larger population segment. The 60's were visually captivated and excited by the first steps on the Moon by the American Neil Armstrong. Fast-forward and color TV, digital sound, 3-dimensional movie theaters are now an unsurprising commodity. What will the next twenty years bring new to physics, and therefore cinema? Where will we go next?