Whether depicting humans battling aliens or a brave geologist saving lives as a volcano erupts, science-fiction films are an exciting visual and sensuous introduction to the workings of science and technology. These films explore a range of complex topics in vivid and accessible ways, from space travel and laser technology to genetic engineering, global warming, and the consequences of nuclear weaponry. Though actual scientific lab work might not be as exciting, science fiction is an engaging yet powerful way for a wide audience to explore some of the most pressing issues and ideas of our time.

In this book, a scientist and dedicated film enthusiast discusses the portrayal of science in more than one hundred films, including science fiction, scientific biographies, and documentaries. Beginning with early films like Voyage to the Moon and Metropolis and concluding with more recent offerings like The Matrix, War of the Worlds, A Beautiful Mind, and An Inconvenient Truth, Sidney Perkowitz questions how much faith we can put into Hollywood’s depiction of scientists and their work; how accurately these films capture scientific fact and theory; whether cataclysms like our collision with a comet can actually happen; and to what extent these films influence public opinion about science and the future. Movies, especially science-fiction films, temporarily remove viewers from the world as they know it and show them the world as it might be, providing special perspective on human nature and society. Yet “Hollywood science” can be erroneous, distorting fact for dramatic effect and stereotyping scientists as remote and nerdy, evil, or noble, doing little to improve the relationship between science and society. Bringing together history, scientific theory, and humorous observation, Hollywood Science features dozens of film stills and a list of the all-time best and worst science-fiction movies. Just as this genre appeals to all types of viewers, this book will resonate with anyone who has been inspired by science-fiction films and would like to learn how fantasy compares to fact.
While they are often not the sort of films to win Oscars, science fiction movies have been around for nearly as long as there have been moving pictures, and Hollywood continues to pump out tales about time-traveling cyborgs, alien encounters, and man-made disasters. Sidney Perkowitz's new book, Hollywood Science, takes a look at a number of popular films that not only feature extensions of science but also a look at scientists themselves, what appears on the silver screen often being a reflection of our own attitudes and worries in a changing world. Movie scientists struggle with personal problems, become heroes, descend into villainy, push the boundaries of what is known, and sometimes acquire a taste for world domination, but how much of any of that is real? Throughout the book, Perkowitz follows a predictable (and often repetitive format); a subject such as "encounters with aliens" is picked, a few well-known movies that fit the topic are summarized in the first half of the chapter, and the latter half is spent quickly confirming or debunking prominent situations in the films. For someone who isn't familiar with Terminator, Gattaca, Blade Runner, Jurassic Park, or any of the other films mentioned this might be a fair approach, but for well-versed fans of science fiction this approach can be a little tedious. Even the discussions about the real science behind Tinseltown premises are a bit shallow and dry, and a more integrated approach, mixing discussions of the films with science instead of segregating them to opposite ends of the chapter, would have been more engaging.

"Hollywood Science" would seem to be a contradiction in terms. The Blob? Mothra? The Giant Mantis? Science fiction movies are a Hollywood staple, and they are also are disproportionately represented among the worst movies ever made. So how can Sidney Perkowitz, who is a research physicist and a professor of physics, take them seriously? Well, he doesn't take all of them seriously, but many he does, and even the ones that are turkeys have something to teach us. In _Hollywood Science: Movies, Science, & the End of the World_ (Columbia University Press), Perkowitz convincingly describes what is good and what is bad about science in the movies, and how sometimes even the bad is good. Movies are, after all, not reality, but the good ones have something to tell us about reality; and the ones that depict scientists or scientific efforts or disasters can prompt useful discussion, even in academic settings. Perkowitz goes through sci-fi movies
starting with the grandfather of them all, Méliès’s _Le Voyage Dans la Lune_ (in which moon voyagers within a gigantic projectile are shot by cannon to the Moon). One of the movies he finds scientifically sound is _Twister_ (1996) which shows tornado-chasers trying to get research tracking gadgets sucked up into a huge tornado, so they can get more information on how tornadoes form. Another weather-themed movie is _The Day After Tomorrow_ (2004) which showed the things that might happen due to global warming. As Perkowitz points out, the rapid disasters in the film are pretty bad science, but still pretty good: the movie was very popular, and people who saw it came out with demonstrably higher concerns about climate change. Genes are a good topic for the movies.

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