

1. Record Nr.	UNINA9910300390003321
Autore	Luukkala Barry B
Titolo	Exploring science through science fiction // Barry B. Luukkala
Pubbl/distr/stampa	New York : , : Springer, , [2014] 2014
ISBN	1-4614-7891-X
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (xix, 241 pages) : illustrations (chiefly color)
Collana	Science and Fiction, , 2197-1188
Disciplina	500 809.3/8762
Soggetti	Science in motion pictures Science fiction films Literature and science Science in mass media
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- 1 Introduction: Discerning the Real, the Possible and the Impossible -- 2 What is the Nature of Space and Time? (the physics of space travel and time travel) -- 3 What is the Universe Made of? (matter, energy and interactions) -- 4 Can a Machine Become Self-Aware? (the sciences of computing and cognition) -- 5 Are We Alone in the Universe? (the search for extraterrestrial intelligence) -- 6 What does it Mean to be Human? (biological sciences, biotechnology and other considerations) -- 7 How do We Solve Our Problems? (science, technology and society) -- 8 What Lies Ahead? (the future of our technological society) -- Appendix A: Catalog of Movies Cited -- Appendix B: Catalog of Television Series Episodes Cited -- Appendix C: Catalog of YouTube Videos Cited -- Appendix D: Solutions to Estimation Problems.
Sommario/riassunto	How does Einstein's description of space and time compare with Dr. Who? Can James Bond really escape from an armor-plated railroad car by cutting through the floor with a laser concealed in a wristwatch? What would it take to create a fully-intelligent android, such as Star Trek's Commander Data? How might we discover intelligent civilizations on other planets in the galaxy? Is human teleportation

possible? Will our technological society ever reach the point at which it becomes lawful to discriminate on the basis of genetic information, as in the movie GATTACA? Exploring Science Through Science Fiction addresses these and other interesting questions, using science fiction as a springboard for discussing fundamental science concepts and cutting-edge science research. The book is designed as a primary text for a college-level course which should appeal to students in the fine arts and humanities as well as to science and engineering students. It includes references to original research papers, landmark scientific publications and technical documents, as well as a broad range of science literature at a more popular level. With over 180 references to specific scenes in 130 sci-fi movies and TV episodes, spanning over 100 years of cinematic history, it should be an enjoyable read for anyone with an interest in science and science fiction.
