1. Record Nr. UNINA9910741181303321

Autore	May Andrew (Andrew James)
Titolo	How Space Physics Really Works : Lessons from Well-Constructed Science Fiction / / by Andrew May
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031339509 3031339509
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (156 pages)
Collana	Science and Fiction, , 2197-1196
Disciplina	523.01
Soggetti	Astrophysics Physics Solar system Gravitation Classical and Continuum Physics Space Physics Newtonian Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Physics in Science Fiction -- Chapter 2: Gravity -- Chapter 3: Orbital Dynamics -- Chapter 4: Rocket Science -- Chapter 5: Living in a Vacuum.
Sommario/riassunto	There is a huge gulf between the real physics of space travel and the way it is commonly portrayed in movies and TV shows. That’s not because space physics is difficult or obscure – most of the details were understood by the end of the 18th century – but because it can often be bafflingly counter-intuitive for a general audience. The purpose of this book isn’t to criticize or debunk popular sci-fi depictions, which can be very entertaining, but to focus on how space physics really works. This is done with the aid of numerous practical illustrations taken from the works of serious science fiction authors – from Jules Verne and Arthur C. Clarke to Larry Niven and Andy Weir – who have taken positive pleasure in getting their scientific facts right.