

1. Record Nr.	UNINA9910789953503321
Autore	Levi Mark <1951->
Titolo	Why cats land on their feet, and 76 other paradoxes and puzzles in physics [[electronic resource] /] / Mark Levi
Pubbl/distr/stampa	Princeton, : Princeton University Press, c2012
ISBN	1-280-49449-2 9786613589729 1-4008-4172-0
Edizione	[Course Book]
Descrizione fisica	1 online resource (205 p.)
Disciplina	530
Soggetti	Science Physics
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	Frontmatter -- CONTENTS -- ACKNOWLEDGMENTS -- 1. Fun with Physical Paradoxes, Puzzles, and Problems -- 2. Outer Space Paradoxes -- 3. Paradoxes with Spinning Water -- 4. Floating and Diving Paradoxes -- 5. Flows and Jets -- 6. Moving Experiences: Bikes, Gymnastics, Rockets -- 7. Paradoxes with the Coriolis Force -- 8. Centrifugal Paradoxes -- 9. Gyroscopic Paradoxes -- 10. Some Hot Stuff and Cool Things -- 11. Two Perpetual Motion Machines -- 12. Sailing and Gliding -- 13. The Flipping Cat and the Spinning Earth -- 14. Miscellaneous -- Appendix -- Bibliography -- Index
Sommario/riassunto	Ever wonder why cats land on their feet? Or what holds a spinning top upright? Or whether it is possible to feel the Earth's rotation in an airplane? Why Cats Land on Their Feet is a compendium of paradoxes and puzzles that readers can solve using their own physical intuition. And the surprising answers to virtually all of these astonishing paradoxes can be arrived at with no formal knowledge of physics. Mark Levi introduces each physical problem, sometimes gives a hint or two, and then fully explains the solution. Here readers can test their critical-thinking skills against a whole assortment of puzzles and paradoxes involving floating and diving, sailing and gliding, gymnastics, bike riding, outer space, throwing a ball from a moving car, centrifugal

force, gyroscopic motion, and, of course, falling cats. Want to figure out how to open a wine bottle with a book? Or how to compute the square root of a number using a tennis shoe and a watch? Why Cats Land on Their Feet shows you how, and all that's required is a familiarity with basic high-school mathematics. This lively collection also features an appendix that explains all physical concepts used in the book, from Newton's laws to the fundamental theorem of calculus.
