

Everyday Physics

Unusual insights into familiar things

By Jo Hermans

Keynote

Here is a physics book like you've never seen before: accessible, fun, attractive and easy to follow – perfect for anyone, young or old.

Description

This is a physics book like you've never seen before: accessible and fun – perfect for anyone, young or old, with a healthy dose of curiosity.

- How can you tell where a sound is coming from?
- What is the human energy equivalent of a vacuum cleaner?
- How does GPS work?
- Why do eggs explode in the microwave?
- Is there a vacuum inside double-glazed windows?
- Can you get less wet by cycling faster?

Hundreds of full-color photos and diagrams make the explanations super easy to follow. There are lots of home experiments, too, most of which can be done using simple items from the kitchen. For example, by using a glass full of water, a few drops of milk and a torch, you can show why the sky is blue and why the setting sun is red. If you want to dig a bit deeper, there are extra resources in the shaded boxes throughout.

You can read *Everyday Physics* in whatever order you want, dipping in and out of the different sections. Based on Herman's *Everyday physics* lecture series, it combines deep physical insights with back-of-the-envelope calculations, relating abstract physics concepts to the real world, often in a surprising way.

It's perfect for all ages: parents, grandparents, college students and anyone with a healthy interest in the world around them.

This book will bring the magic of physics to your everyday life. Once you discover the beauty of science, ordinary things will become extraordinary.

Audience

Anyone who is curious about the world around them, including parents, grandparents, teachers and students.

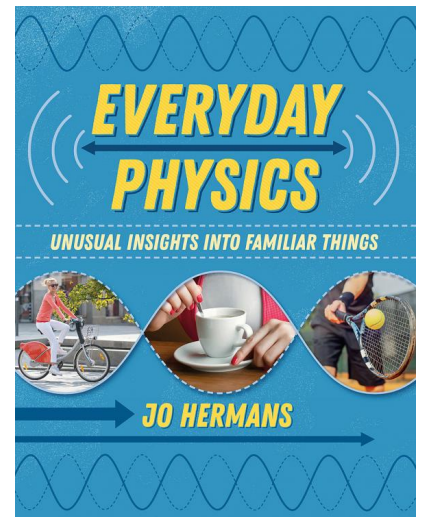
Competing Titles

- *Storm in a Teacup: The Physics of Everyday Life*, Czernski
- *How Things Work - Usborne Look Inside*, Jones, Tognetti
- *The Physics of Everyday Things: The Extraordinary Science Behind an Ordinary Day*, Kakalios

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Keywords: popular science; physics experiments; fun with physics; physics; science; experiments; wind chill; slippery ice; sound; light; rainbows; fast fall skydiving; how rainbows form; how GPS works; sauna heat; sound travel; red setting sun; dry air in winter; human energy; energy cost of talking;

Audience: General/trade

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The Author

Prof Jo Hermans is Emeritus Professor of Physics at Leiden University in the Netherlands. In addition to his academic research and teaching, he is active in promoting science to the general public. His books have been translated worldwide. He is a Knight of the Order of Orange-Nassau.

Review Quotes

I love the book. I am not sure I have ever before seen a physics book look as 'friendly'. I like how it flows and the way the topics are applicable to the world. My physics pupils would love this book, and the content is relevant to their physics curriculum.

Physics Teacher

A gold mine of physics in the world around us, ranging from light to sound and from indoors to outdoors, written in a friendly style with beautiful diagrams, photos, and explanations. Each chapter is a joy to read.

Prof Sanjoy Mahajan, MIT

Everyday Physics is written in a very accessible style with fantastic use of pictures. It provides satisfyingly clear explanations and it covers a lot of ground. A lovely book to have.

Prof Jeff Forshaw, Professor of Physics, University of Manchester and author of 'Why Does $E=mc^2$?'

Everyday phenomena explained simply and clearly for all to understand.

Professor Mete Atature, Professor of Physics, University of Cambridge

This is an interesting collection of explanations & discussions of the physics of everyday situations. The range of topics and the number of situations is extensive. By providing clear information, it encourages further thought.

Institute of Physics and Engineering in Medicine

Do try this at home. Satisfaction guaranteed for every inquisitive soul.

Dr Eppo Bruins, Member of Parliament, The Netherlands
