

Book Review: "Physics of the Impossible", by Michio Kaku

by Captain Loriaarra

"Physics of the Impossible" is a book exploring the possibilities of creating certain Sci-Fi technology for real. Its author, Michio Kaku, is a physicist and writer, who, much like the late Isaac Asimov, has served as adviser to many popular Sci-Fi shows.

Kaku gives a short summary of how he actually came to be a physicist and particularly interested in the "impossible" in the preface of this book. I have to say, any parent should gain a completely different appreciation for the simplicity of their children's science fair projects when reading about Michio's 2.3-million-electron-volt betatron particle accelerator that he built for his high school's science fair in his mom's garage. That thing consumed the entire kilowatt power output of his house and generated a magnetic field some 20,000 times that of our Earth! His goal? To generate a beam of gamma rays powerful enough to create antimatter.

I just simply had to laugh. I'm glad my children stuck with exploring the human anatomy, making paper-mache volcanoes, or other basic projects.

Having come to appreciate that the "impossible" is often a relative term, Kaku actually divides the subject matters discussed in his book – from force fields, cloaks, phasers, and starships, to time travel and perpetual motion machines – into three different categories, or classes. "Class I" are the technologies that might be impossible right now, but don't violate the known laws of physics and therefore could be possible in the near future. "Class II" are the technologies that sit at the very edge of current understanding and if they're at all possible to achieve, it will probably not be until millennia from now. "Class III" are those technologies that completely violate the known laws of physics.

I actually like how he breaks these fictional technologies into classes. After all, the word "impossible" seems so final, when in reality what is impossible has much to do with the knowledge and abilities of the days you live in, just like so many things in our everyday life would seem quite impossible for someone from medieval times, for example.

Real-life physics seem to be a quite dry matter to many, and while parts of the book are not easy to digest, I'm as much a Sci-Fi geek as I'm a true science geek. I utterly enjoyed diving into these subjects. Kaku's mixing of drawing on his extensive knowledge as a physicist and his love of Sci-Fi stories and fictional technology makes the book fun to read for anyone who is of like mind as myself. I highly recommend it.

FYI, I have to admit, I took pages of notes for possible use in future sims. Yes, it'll be my cheat sheet for plots to come. Sue me!

