

Book Review

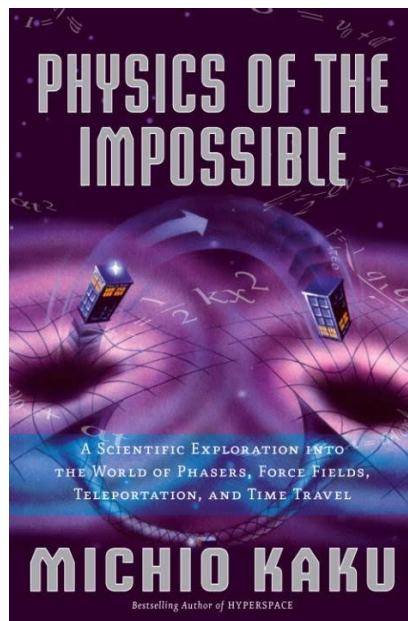
Physics of the Impossible

Author: Michio Kaku

Publisher: Doubleday (Paperback)

I had not read any scientific literature since finishing Stephen Hawking's *A Brief History of Time*. Previous to that I read *Cosmos* by Carl Sagan, probably, twenty years ago. I couldn't find any comparable scientific literature for several years that would be as interesting and informative as the two mentioned above.

I recently finished reading *Physics of the Impossible* by Michio Kaku, a professor of theoretical physics at the City College of New York. Michio Kaku's *Physics of the Impossible* describes many of the concepts such as tele-transporting, antimatter energy, warp drives, space elevators, time travel, and much more quite vicariously for his readers. In doing so, Michio Kaku uses many science fiction examples in the book.



Each of the improbable applications of science is classified at one of three levels. Class I impossibilities have no problems with today's science but present significant engineering challenges. We can't do them today, but could well be able 100-200 years. Class II impossibilities sit on the edge of our current knowledge of physics. They may be possible in the far future, but getting there would require a big breakthrough. Class III impossibilities actually break the laws of physics.

Though Kaku has a light and approachable style, *Physics of the Impossible* lacks explanations of premises and assumptions that *A Brief History of Time* or *Cosmos* have. Instead we get insights into just why the technology in question needs to be labelled impossible, and what the potential ways around the difficulties are.

I do think that there's a slight tendency to over-simplify. It's always hugely difficult to describe complex physics like quantum theory in a few lines, and the simplification that is essential to be able to do this occasionally makes a point slightly inaccurate. These are very minor points, though the simplification is almost a necessity in a book that has the huge scope as this one.