

La puerta de los tres cerrojos Author: Sonia Fernández-Vidal Reader: Cath Forrest

The world of quantum physics is stranger than fiction. Down among the tiny sub-atomic particles and approaching the speed of light, extraordinary things happen and the ideas needed to understand them will blow your mind.

This fantasy novel aimed at young readers is by Sonia Fernández-Vidal, who has combined a career as a quantum physicist, working on the CERN Large Hadron Collider project and at other distinguished institutions, with a lifelong interest in teaching. She is therefore perfectly placed to bring this highly complex branch of science to life.

"The Door with Three Locks" tells the story of fourteen-year-old Niko, who wakes up one day to a message on his bedroom ceiling telling him to "do things differently if you want different things to happen". Taking a different route to school, he comes across a mysterious house and its door with three locks and, once inside, is plunged into the weird and wonderful quantum world. Accompanied by a young elf boffin called Eldwen and the clever, beautiful fairy Quiona he is drawn into a series of magical adventures.

Meet Schrodinger's curious disappearing cat, the watchmaker of relative time and the ridiculous celebrity Higgs Boss-on, gathering a mass of fans around him as he sings of how they seek him everywhere. Gasp as characters (not least the cat) are split in the suspense of superpositions. Marvel as they tunnel through walls or are teleported by entangled particles Enjoy a football match between matter and anti-matter after the big bang and dance on the floor of Heisenburg's Principle of Uncertainty, where no one can stop moving.

Tremble at the spectres of black holes unleashed to pursue Niko and his friends by the angry elf Andred, thrill as they swerve at breakneck speed through a living labyrinth after hurtling out of the Large Particle Collider. They must escape these dangers and more to reach the paradise of Shambla, home of wise old Master Zen-O and his fellow wizards. Only then can Niko return safely home with a new understanding of the quantum world to enrich his own. He will remain forever "entangled" with his fairy sweetheart Quiona and her farewell note tells him that love is the most powerful force in the universe.

The book is full of riddles and puzzles, which both draw the reader on and encourage the lateral thinking required to handle the concepts involved in quantum-land: "Q. What do you need to close a door? A. For the door to be open"; "Q. How can you prick a balloon without letting the air out? A. Who said the balloon was blown up?"

It is written in straightforward language and is full of illustrations, graphics and exclamations in typefaces that leap off the page. At the end there is a useful glossary of scientific terms.

"The Door with Three Locks" is attractive, accessible, entertaining, fascinating, surprising and by turns exciting and cute. It is a great introduction to an astonishing subject.

This is a summary of the report by Catherine Forrest