



It's the theory of matter: What is stuff, what does it consist of, how does it behave? Quantum refers to tiny particles and the principles that govern them.

— Mr George Musser, visiting writer-in-residence at the Centre for Quantum Technologies, on quantum physics

Quantum physics for kids

Author takes a year to write comic book to introduce quantum physics to children, but he had to learn about the complex subject first



Report by **SHAFFIQ ALKHATIB**
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He did not understand what quantum physics was about.

Author and comic book artist Otto Fong admitted that tackling the subject for a children's comic was a daunting task even for him, a former science teacher and engineer.

But after a year, the 47-year-old has finally completed his book on the subject.

Titled *The Quantum Bunny*, it will be launched at the Arts House at Old Parliament Lane today.

Mr Fong is the creator of the *Sir Fong's Adventures in Science* comic book series, which tries to make the learning of science more enjoyable for children.

The series has sold about 15,000 copies.

He is also the man behind two Singapore Arts Festival plays — *Mr Beng* in 1999 and *HERStory* in 2011.

Mr Fong said that to learn about quantum physics, he had lengthy discussions with scientists from the Centre for Quantum Technologies (CQT), which is part of the National University of Singapore.

Established in December 2007, the CQT conducts interdisciplinary theoretical and experimental research in quantum theory and its application in information technologies.

Mr Fong told *The New Paper* on Wednesday: "I spent many months just trying to learn about quantum physics from the scientists and even attended their lectures.

"Quantum physics is complicated and it was initially difficult for me to grasp. I had to understand what it was about first before I could write on the subject."

Mr Fong, who was a science teacher at Raf-

fles Institution from 2000 to 2007, said *The Quantum Bunny* was his most difficult book to write.

But he stressed that it will not teach quantum physics to young people but will make some of its concepts familiar to them.

"In a nutshell, my latest work is a story about a misunderstood bunny, Qbit, who is in a quest to be accepted. The goal is to get young readers acquainted with the bizarre, almost cartoonish, behaviour of this physics by telling a good story," he said.

So what exactly is quantum physics?

Mr George Musser, a visiting writer-in-residence at the CQT, said: "It's the theory of matter: What is stuff, what does it consist of, how does it behave? Quantum refers to tiny particles and the principles that govern them."

STRANGE THINGS

The CQT's outreach and media relations manager, Ms Jenny Hogan, told TNP that according to quantum physics, particles like atoms can do strange things such as behaving like waves or be in two places at once.

She said: "Now scientists are working out ways to control these particles to build quantum technologies, from future supercomputers to devices for secure identification at ATMs and gravity-measuring devices for oil prospecting."

CQT research assistant Tan Peng Kian, 31, makes a cameo appearance in *The Quantum Bunny* as one of four guardians Qbit encounters on his adventure.

He said: "It's very weird to see myself as a comic book character. I'm very happy to see that Otto's book is finally completed."

The *Quantum Bunny* will be available at major bookshops next month at \$13 per copy.

FOR THE KIDS: Mr Tan Peng Kian (left) has a cameo appearance in comic book *The Quantum Bunny*, written by Mr Otto Fong (right).

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