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Physics Class

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"When you come up with a theory, you fall in love with the beauty the simplicity and elegance of it. But then you have to get a sheet of paper and pencil and crack out all the details. Hundreds and hundreds of pages. Because you have to prove it."

-Michio Kaku

Michio Kaku is a theoretical scientist and a leading figure in the movement to populate science once again. In his free time he writes bestselling books explaining physics and how advancements in the field will shape the future. Kaku is also currently trying to complete Albert Einstein's quest to unite the four fundamental forces of nature into a single unified theory of everything. "In Einstein's equation, time is a river. It speeds up, meanders, and slows down. The new wrinkle is that it can have whirlpools and fork into two rivers. So, if the river of time can be bent into a pretzel, create whirlpools and fork into two rivers, then time travel cannot be ruled out."

Kaku has starred in a ton of science programs for television such as Discovery, Science Channel, BBC, ABC, and History Channel. Beyond his numerous bestselling books, he has also been columnist for top popular science publications such as Popular Mechanics, WIRED, Discover, Newsweek, COSMOS, and New Scientist.

Michio Kaku is the co founder of String Field theory. “First of all, the Big Bang wasn’t very big. Second of all, there was no bang. Third, Big Bang Theory doesn't tell you what banged, when it banged, how it banged. It just said it did bang. So the Big Bang Theory in some sense is a total misnomer.” The String Theory takes you before the Big Bang. String Theory says that maybe two universes collided to create our universe, or maybe our universe is butted from another universe leaving a wormhole. He has also found an equation to support this theory:

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\begin{aligned}
\hat{h}s(\mu_1,\mu_2,\Theta,\varphi) := {} & 2[(|\mu_2+3\delta_2|-|\mu_2+\delta_2|)\sqrt{|\mu_1+2\delta_1|} \\
& +(|\mu_2+\delta_2|-|\mu_2-\delta_2|)\sqrt{|\mu_1|}]s(\mu_1+2\delta_1,\mu_2+2\delta_2,\Theta,\varphi) \\
& -2[(|\mu_2+3\delta_2|-|\mu_2+\delta_2|)\sqrt{|\mu_1-2\delta_1|} \\
& +(|\mu_2+\delta_2|-|\mu_2-\delta_2|)\sqrt{|\mu_1|}]s(\mu_1-2\delta_1,\mu_2+2\delta_2,\Theta,\varphi) \\
& +2[(|\mu_2-\delta_2|-|\mu_2-3\delta_2|)\sqrt{|\mu_1-2\delta_1|} \\
& +(|\mu_2+\delta_2|-|\mu_2-\delta_2|)\sqrt{|\mu_1|}]s(\mu_1-2\delta_1,\mu_2-2\delta_2,\Theta,\varphi) \\
& -2((|\mu_2-\delta_2|-|\mu_2-3\delta_2|)\sqrt{|\mu_1+2\delta_1|} \\
& +(|\mu_2+\delta_2|-|\mu_2-\delta_2|)\sqrt{|\mu_1|}]s(\mu_1+2\delta_1,\mu_2-2\delta_2,\Theta,\varphi)) \\
& +(\sqrt{|\mu_1+\delta_1|}-\sqrt{|\mu_1-\delta_1|}) \\
& \cdot[(|\mu_2|+|\mu_2+4\delta_2|)s(\mu_1,\mu_2+4\delta_2,\Theta,\varphi) \\
& -4|\mu_2|s(\mu_1,\mu_2,\Theta,\varphi)+(|\mu_2|+|\mu_2-4\delta_2|)s(\mu_1,\mu_2-4\delta_2,\Theta,\varphi)] \\
= {} & -\frac{27}{4}|\mu_1|^{1/3}|\mu_2|^{1/3}(|\mu_1+\delta_1|^{1/6}-|\mu_1-\delta_1|^{1/6}) \\
& \times(|\mu_2+\delta_2|^{1/3}-|\mu_2-\delta_2|^{1/3})^2 \\
& \times\left[\left(1+4\gamma^2-\frac{2\gamma^2}{1+\gamma^2}(3+2\gamma^2)-\frac{1}{1+\gamma^2}\right)\frac{\hat{\mathcal{J}}_1^2}{\hbar^2}\right. \\
& \left.+\frac{3\gamma^2}{1+\gamma^2}\frac{\hat{\mathcal{J}}_0^2}{\hbar^2}-16\frac{\hat{p}_\varphi^2}{\hbar^2}\right]s(\mu_1,\mu_2,\Theta,\varphi). \qquad (7)
\end{aligned}
$$

Though Kaku hopes to one day condense the theory of everything into just an inch, he will have to stick with this for now.

Michio Kaku built an atom smasher in his garage when he was only a tennager. Kaku claims his mom said it was alright as long as he took out the garbage first. He met his wife while ice skating. It's something they both enjoy doing together now with their two daughters. He has two daughters and jokes that even though he is a futurist his daughters tell him his taste in music is absolutely prehistoric. If you count The Beatles as prehistoric, that is.

Overall, Michio Kaku has been a very influential modern physicist. He is widely and well known for his works as a futurist; he inspires people to have something to look forward in the future. On top of being a great family man, he also happens to be a best selling author, a professor, and the co founder of the String Field Theory.

"I want to know how far you can push science until it completely falls apart."

-Michio Kaku

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