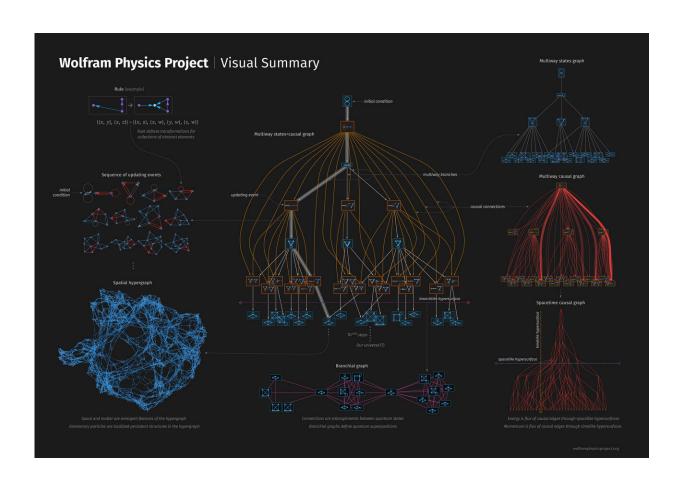


The Wolfram Physics Project hopes to find fundamental theory of physics

April 15 2020, by Bob Yirka



Credit: wolframphysics.org

Physicist and entrepreneur Stephen Wolfram has unveiled "The Wolfram Physics Project," which he subtitles "A Project to Find the Fundamental Theory of Physics." The aim of the project is to enlist the



assistance of people around the globe to find the fundamental theory of physics—the theory that ties together all of physics, from the general theory of relativity to quantum mechanics. Wolfram has also published several documents on his website that outline the history behind the development of the project. Early in his career, he was a distinguished physicist, but later, left to found a computer company. More recently, he has found a renewed interest in pursuing his ideas about fundamental physics that he believes will lead to the discovery of a fundamental theory.

Wolfram suggests that the universe can be modeled using points in space and rules that, when applied, generate more points. As more points are added, a network is built. He further suggests that model universes can be built using hypergraphs that describe such networks—and the rules that are applied eventually determine the characteristics that make up a given universe. And this, he believes, suggests that it should be possible to start with a few points in space and develop a model that depicts the real universe—at least as we know it. All that is needed, he suggests, is for somebody to come up with the right rules. And that is the whole point of his project. Those who are interested need only visit the project website and begin downloading documents that further explain Wolfram's theories and how citizen scientists can get involved—and if they desire, create some rules and add them to the project.

In one of his papers outlining the path the project has taken, Wolfram notes that he and his team were well on their way to unveiling the project just as the COVID-19 pandemic began to unfold. They discussed delaying the release, but then decided that with much of the world locked down, there might be interest in a deeply cerebral <u>project</u> by isolated people who are growing bored. He notes that Isaac Newton did some of his best work while self-isolating during the plague.



More information: www.wolframphysics.org/

www.wolframphysics.org/technical-introduction/

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