

I'm Hitoshi Murayama, the founding director of the Institute for the Physics and Mathematics of the Universe, or IPMU for short, which is under the Todai Institutes for Advanced Study (TODIAS) of the University of Tokyo.

As you probably know, the IPMU was launched based on the support by the World Premier International Research Center Initiative (WPI) of MEXT. As the name says, we combine physics and mathematics to study the Universe. We want to scientifically address simple questions that a small child might look up the night sky and ask: how the universe began, whether it has an end, what it is made of, what laws govern it, and why we exist in it. We believed it would take concentrated effort of mathematicians, physicists, and astronomers to achieve this goal.

We launched from scratch back in October 2007. But we quickly started to attract excellent scientists, and we now boast more than 70 full-time scientists on site, where more than a half of them are not Japanese. We have already produced many fascinating results. For example, our Assistant Professor John Silverman showed observationally that a nearby galaxy stimulates the growth of the supermassive blackhole in the other galaxy. Associate Professor Naoki Yoshida showed how the first stars formed from the primordial gas of hydrogen and helium and grew to the mass about 40 times that of the Sun using computer simulations. Such first stars ignited nuclear fusion in their cores to produce elements such as carbon, oxygen, and iron that are necessary for our bodies. Our postdocs Domenico Orlando and Susanne Reffert showed the possibility of a quantum theory of gravity without self contradictions.

It is a great honor that the Kavli Foundation liked our exciting research and international composition, and invited us to the family of Kavli Institutes that exist only at the most prestigious universities in the world. I also take it as a testimony that the IPMU has gained a very high international recognition. In addition, the donation from the Kavli Foundation creates endowment that brings in annual returns *in perpetuity*. Such funds would be extremely useful to kickstart new ideas at the development stage not ready for research grant proposals, or to recruit topnotch researchers from around the world.

For me, it is now the foremost importance to secure resource to keep the Kavli IPMU going beyond the duration of the WPI funding. I will work hard to boost endowment further to fund named professorships or named fellows. I plead for a wider support from the society at large.