

## Outline of Selected Projects Comments by Program Committee

Host institution name	The University of Tokyo
Title of center project	Institute for the Physics and Mathematics of the Universe
Chief entire-project officer	Hiroshi Komiya
Chief center-project officer	Yoichiro Suzuki (Affiliation: Institute for Cosmic Ray Research, The University of Tokyo ,Title: Director )
Prospective center director	Hitoshi Murayama, (Affiliation: University of California at Berkeley and Lawrence Berkeley National Laboratory, Title: MacAdams Professor of Physics and Faculty Senior Staff)

<Project Summary>

We thought we understood the universe, but we didn't. We had learned much about the atoms, which turned out to be less than 5% of the universe. The rest, dubbed dark matter and dark energy, remains a big mystery.

This Institute will study the most basic questions about the universe. How did it start? What is it made of? What is its fate? Why do we exist? We strive to produce new data, create new mathematics to describe them, and discover new laws of nature. We may well find that Einstein was wrong after all.

This institute is unique in the world because it spans from mathematics to theoretical and experimental physics. It will gather the best minds from around the world, and make Japan a leading scientific center of the world. It will inspire young minds to enter physics and mathematics, building the future workforce of the nation.

<Remarks>

A constellation of world class top-notch researchers with meaningful commitment to the project is presented.

This will give a good public image for the WPI Initiative – young, dynamic and exciting.

Young, highly articulate prospective center director who is visionary and energetic is a very positive attribute.

To organize joint collaboration between physicists and mathematicians is an interesting goal. A young director and young PIs could be good advocates for this goal.

The plan offers one of the best chances for exerting a transformative effect on Japan's research landscape.

Strong and substantial supports from the host institution and University President are presented.

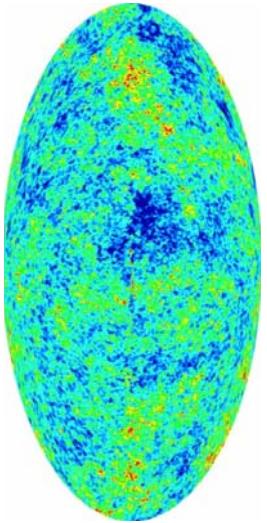


# Institute for the Physics and Mathematics of the Universe



We address the most basic questions

- How did the Universe start?
- What is it made of?
- What is its fate?
- What are its fundamental laws?
- Why do we exist?



We create new data, new mathematics and new physics

- International center at U. Tokyo Kashiwa campus
- Unique research center in the world
- Best minds from around the world

