

# World Premier International Research Center (WPI) Initiative Comments on FY2007 WPI Project Progress by Program Committee

Host Institution	The University of Tokyo	Host Institution Head	Hiroshi Komiyama
Research Center	Institute for the Physics and Mathematics of the Universe (IPMU)	Center Director	Hitoshi Murayama

## 1. Status of overall progress

The Institute for the Physics and Mathematics of the Universe (IPMU), the University of Tokyo, has achieved remarkable visibility in a very short time. It has introduced innovative practices not seen elsewhere in Japan. Unlike the four other WPI programs, IPMU is on its way to developing into a global research institute of a type unprecedented in Japan. It is totally new, and truly global. This has been made possible only by the distinct career background of its Director. His impact and leadership have been noted worldwide.

With this acknowledgement of IPMU's early successes, let us remind ourselves that one of the principal objectives of the WPI program is to carry out much needed system reforms in Japanese research organizations. IPMU represents a golden opportunity to advance such reforms. If the center should fail in this respect, it would be a great opportunity missed. The University of Tokyo must provide IPMU with strong support and help them achieve their goal.

## 2. Points that need improvement

IPMU's growing process is not without some difficulties. Most of the Japanese PIs are employed by other institutions or departments (*Ken-nin*). The duties imposed by their employment take priority over their IPMU activities, and they remain loyal to their home institutions. There are some indications that the director's voice is not heard by all the PIs.

To build a laboratory with world-class theoretical activities, IPMU should hire a core of theoretical PIs and station them on the Kashiwa Campus, while making an effort to secure more full-time researchers, rather than *Ken-nin* positions. We also recommend that more effort be made to attract young foreign PIs to the Kashiwa Campus.

To make IPMU a globally visible WPI research center, The University of Tokyo should devote effort to meeting the following imperatives:

- 1) Make every effort to reduce the lectures and administrative duties assigned to the PIs.
- 2) Allow IPMU members to take graduate students.
- 3) Take specific measures to integrate IPMU with the rest of the university. Otherwise, IPMU risks becoming isolated and thereby not able to achieve the transformative role that the WPI program intends centers to play at their host institutions.

## 3. Others

In addition, the following are some opinions expressed by the program committee members.

1. As IPMU is starting from scratch, it should not be rushed to meet the same recruitment numbers as the other centers.
2. To advance collaboration among research institutions, Japan and MEXT need to create an environment that is conducive to one researcher being able to work at multiple research institutions. System reforms are needed in the area of personnel administration.
3. It may be very difficult, though important, to merge mathematicians with physicists. What is the Director's view on how to accomplish this?
4. It is recommended that IPMU deliver at least some of its seminars and other programs over the Internet/WWW (streaming video, Skype, etc.) so as to reach a broader audience and encourage more discussions with remote locations, including satellites, the rest of University, and worldwide institutions with similar interests.
5. It is important that IPMU be allowed to innovate so as to have a truly transformative effect on the university, and perhaps even on Japan.