

February 1, 2011 Japan Agency for Marine-Earth Science and Technology

HPCI Program Workshop: Earthquake and Tsunami Disaster Mitigation

- Next-generation Supercomputer to Shape Future Strategies -

The Japan Agency for Marine-Earth Science and Technology will commence a 5-year research into the "Projection of global change toward the mitigation of natural disasters" from April 2011 under the government's High Performance Computing Infrastructure (HPCI) Program ($\underline{*}$).

Launched by the Ministry of Education, Culture, Sports, and Science and Technology (MEXT), the HPCI Program is designed to enhance the nation's computing science and technology, by making the most of the capability of the next-generation supercomputer and innovative computer resources created around it. JAMSTEC will dedicate itself to producing high-quality data and research findings which will greatly assist the creation of an advanced earthquake hazard map and a highly reliable tsunami warning system.

To design the 5-year project in greater detail, JAMSTEC will hold a workshop set out below. Discussions will cover four topics; "Lessons from the Great Hanshin Earthquake," "Scenario studies on large earthquakes," "Goals of earthquake and tsunami prediction," and "Natural disasters and preventative measures in urban areas." through which researchers and participants will share information on cutting edge computer simulations and their future development.

Workshop Details

1.	Date and time	:	Monday, February 28, 10:00 - 17:30
2.	Venue	:	Konan University Port island Campus(<u>Map</u>) Lecture Hall
3.	Admission	:	Free (No pre-registration required)
4.	Host	:	JAMSTEC
5.	Co-hosts	:	Konan University, Foundation of Computational Science

6. Program : <u>Appendix</u>(in Japanese)

***HPCI Program**

Spanning for five years from fiscal 2011 to fiscal 2015, the HPCI Program is designed to build a framework to enhance the nation's computer science and technology, by leveraging the high performance computing infrastructure (HPCI) centered on the next-generation supercomputer.

Focusing on the five research fields in which HPCI is expected to produce major scientific and social breakthroughs, the program aims to:

- (1) maximize the capability of HPCI to achieve scientific innovation,
- (2) develop human resources able to operate advanced computer programs, and
- (3) establish the backbone for cutting-edge computing research and education.

As an institute representing Research Field 3 -- Projection of global change toward the mitigation of natural disasters -- JAMSTEC will conduct studies on (1) global projection of tropical cyclone trends in simulated global warming, (2) verification of localized torrential rain prediction, (2) development of infrastructure for an advanced earthquake hazard map, and (4) development of a highly reliable tsunami warning system. Research for earthquake and tsunami disaster mitigation includes; improving earthquake prediction, enhancing accuracy in tsunami warning systems, and computer simulations of natural disasters in urban areas.

High Performance Computing Infrastructure (HPCI): an Innovative computing infrastructure planned to be built to connect Japan's next generation supercomputer "Kei" and other supercomputers across the nation. It will allow researchers to share simulation results and collaborate on joint research projects. Kei will begin operation in fall 2012.

Appendix



Contacts:

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(For publication)

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