



Leadership  
Computing  
Facility



## Memorandum of Understanding

Argonne Leadership Computing Facility (ALCF), and RIKEN Advanced Institute for Computational Science (AICS) wish to establish a cooperative relationship through mutual assistance in the areas of education and research. This memorandum of understanding (MOU) identifies areas of mutual interest to the ALCF and AICS in support of petascale computing projects at the two institutions. This MOU indicates the intent of ALCF and AICS to cooperate in collaborative projects to facilitate the widespread and effective use of petascale computing through the development and evaluation of new computing system software and science and engineering applications. Subject to the availability of funds, computing resources, and personnel, ALCF and AICS intend to collaborate on:

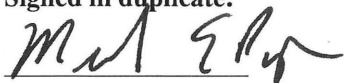
- Investigation of the scaling and performance of scientific and engineering applications on existing and future petascale and beyond computers.
- Evaluation of petascale computing architectures, application development environments, programming models and languages, (e.g., MPI/OpenMP, UPC, Co-array Fortran), debugging and performance tools, and scalable computational libraries.
- Modeling and simulation of the performance of science and engineering applications on existing and future petascale and beyond computers.
- Exchange of students, staff and faculty involved in high performance computing projects between ALCF and AICS.
- Other cooperative activities as mutually determined by both participants.

To support the tasks described above, AICS may make an allocation of time on the *K computer* system available to ALCF staff, and, once the *BG/Q* systems moves into production, ALCF may make a comparable allocation of time on the *BG/Q* system available to AICS staff. This allocation should be for development, testing and evaluation purposes. Each institution acknowledges that major allocations of computing time on the *BG/Q* and *K computer* systems require the submission of requests to the appropriate allocation programs.

This MOU does not create any legally binding obligations between the Participants. The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources. Each Participant should conduct the cooperation under this MOU in accordance with applicable laws and regulations to which it is subject, and international agreements to which its Government is party. Each Participant is to be responsible for the costs it incurs in participating in cooperative activities under this MOU.

Cooperative activities under this MOU may commence upon signature by the institutions and continue for a 3 year period. The Director of Argonne Leadership Computing Facility and the Director of the RIKEN Advanced Institute for Computational Science plan to review the status of these collaborative activities on a semi-annual basis. The Participants may discontinue this MOU at any time in writing. A Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least ninety (90) days written notice to the other Participant. This MOU may be modified in writing by mutual consent of the Participants, and may be extended for additional periods.

Signed in duplicate:



Michael E. Papka  
Director, Argonne Leadership Computing Facility

Date: 11/18/2013  
Place: ARGONNE, IL



Kimihiko Hirao  
Director, RIKEN Advanced Institute for  
Computational Science

Date: 18/11/13  
Place: 7-1-26 Minatojima-minami-machi  
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