Center for Computational Sciences University of Tsukuba

Mission

The mission of the Center for Computational Sciences is to promote scientific discovery through the application of advanced computing technologies, and to support computational science research at Japanese universities and institutions by operating cutting-edge computing systems.

The Center aims to carry out research on critical issues in fundamental science, material science, life science and environmental science by performing large-scale simulations and large-scale data analysis. To realize this goal, the Center performs research and development of high-performance computing systems and networks, as well as advanced studies in computer and information science.

Chronology and Major Events

CP-PACS

FIRST-Cluster

PACS-CS

T2K-Tsukuba

HA-PACS

1992 Foundation of the Center for Computational Physics (CCP)

1996 Completion of CP-PACS, a 0.6 TFLOPS MPP ranked No. 1 on the Top 500 in Nov. 1996

2002 Completion of HMCS (Heterogeneous Multi-Computer System), an 8.6 TFLOPS coupled CP-PACS/GRAPE-6 system

2004 Reorganization and expansion of CCP, renamed Center for Computational Sciences (CCS)

2006 Two major new computing facilities start operation.

PACS-CS a general-purpose 14.3 TFLOPS MPP cluster for computational sciences

FIRST an HMCS-E for astrophysical simulations General-purpose 3.5 TFLOPS+gravity 35 TFLOPS

2008 Completion of T2K-Tsukuba system, a 95.4 TFLOPS cluster ranked No. 20 on the Top 500 in Jun. 2008

2012 HA-PACS Base Cluster is delivered with 802 TFLOPS of peak performance, ranked No. 41 on the Top 500 in Jun. 2012.

2013 HA-PACS/TCA is added to HA-PACS system with 364 TFLOPS of peak performance in Oct. 2013, and total peak performance of HA-PACS system is expanded to over 1.1 PFLOPS.