

## **Mission of CCS**

The CCS promotes "multidisciplinary computational science" on the basis of the fusion between computational science and computer science. For the purpose, the CCS develops high-performance computing systems by the "co-design". The scientific research areas cover particle physics, astrophysics, nuclear physics, nano-science, life science, environmental science, and information science.

The CCS was reorganized in April, 2004, from the preceding center, Center for Computational Physics that was established in 1992. The CCS is the institute for the above-mentioned research fields and also the joint-use facility for outside researchers. Since 2010, the CCS has been approved as a national core-center, Advanced Interdisciplinary Computational Science Collaboration Initiative (AISCI), by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). The CCS aims at playing a significant role for the development of the Multidisciplinary Computational Science.

## **Chronology and Major Events**

1996	Foundation of the Center for Computational Physic Completion of CP-PACS, a 0.6 TFLOPS MPP ranked Completion of HMCS (Heterogeneous Multi-Comp PACS/GRAPE-6 system		
2002			
2004	Reorganization and expansion of CCP, renamed Ce		
2006	Two major new computing facilities start operation		
	PACS-CS a general-pui	pose 14.3 TFLOPS MPP of	
	FIRST an HMCS-E for	or astrophysical simulatic	
	gravity 35 TFLOPS		
2008	Completion of T2K-Tsukuba system, a 95.4 TFLOPS		
	Jun. 2008		
2012	2 HA-PACS Base Cluster is d	A-PACS Base Cluster is delivered with 802 TFLOPS ne Top 500 in Jun. 2012.	
	the Top 500 in Jun. 2012.		
2013	HA-PACS/TCA is added to HA-PACS system with 364 2013, and total peak performance of HA-PACS syst		
Joint Center for Advanced HPC(JCAHPC) establ		HPC(JCAHPC) established	
2014	COMA(PACS IX) is delivered with 1.001PFLOPS of p		
	Top 500 in Jun. 2014.	) in Jun. 2014.	
2016	6 Oakforest-PACS installed a	nd started operation in J	

## University of Tsukuba Center for Computational Sciences



No. 1 on the Top 500 in Nov. 1996 outer System), an 8.6 TFLOPS coupled CP-

enter for Computational Sciences (CCS)

cluster for computational sciences ons General-purpose 3.5 TFLOPS +

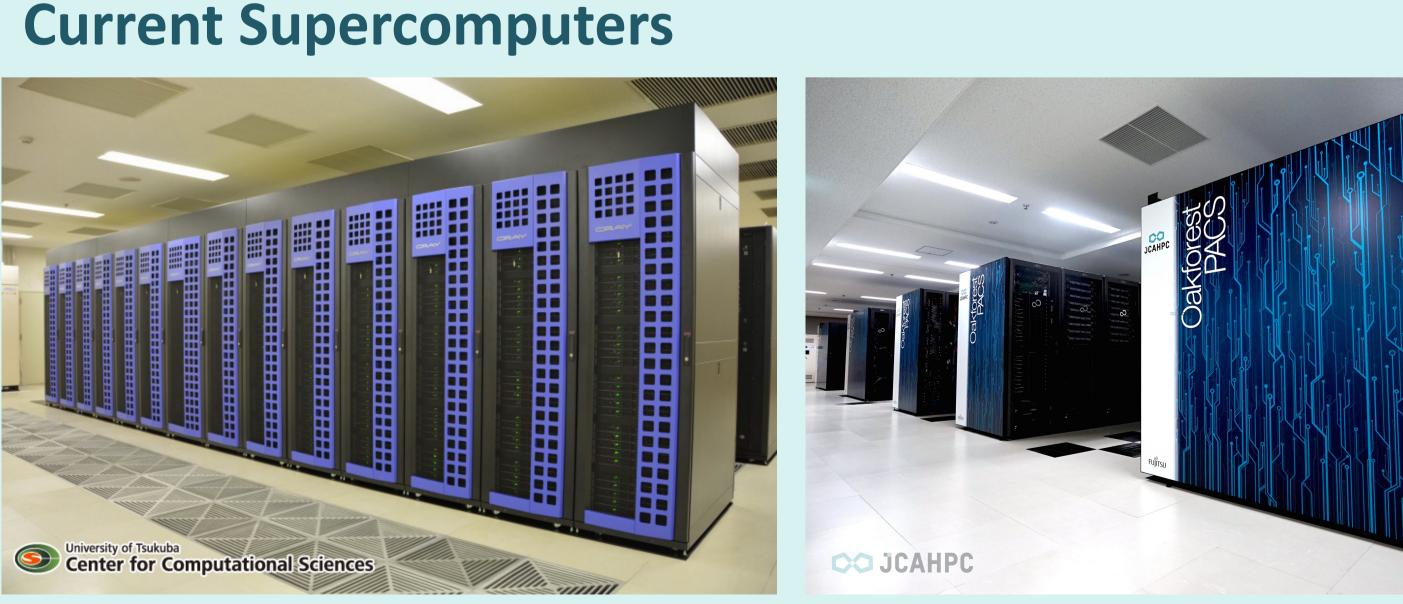
cluster ranked No. 20 on the Top 500 in

'S of peak performance, ranked No. 41 on

4 TFLOPS of peak performance in Oct. tem is expanded to over 1.1 PFLOPS. ed in alliance with the University of Tokyo beak performance, ranked No.51 on the

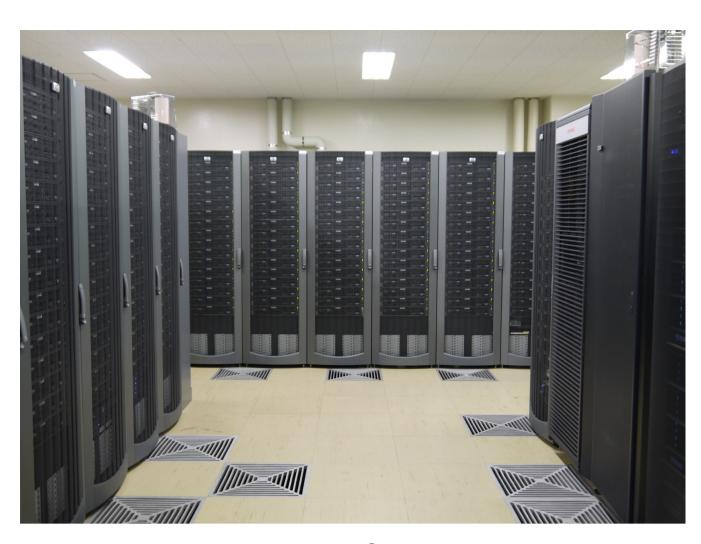






JCAHPC

**CP-PACS** 



**FIRST-Cluster** 

PACS-CS



T2K-Tsukuba



HA-PACS



COMA

## **Oakforest-PACS**

http://www.ccs.tsukuba.ac.jp/



