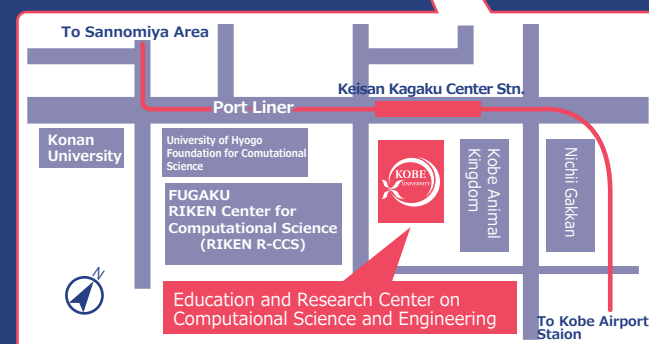
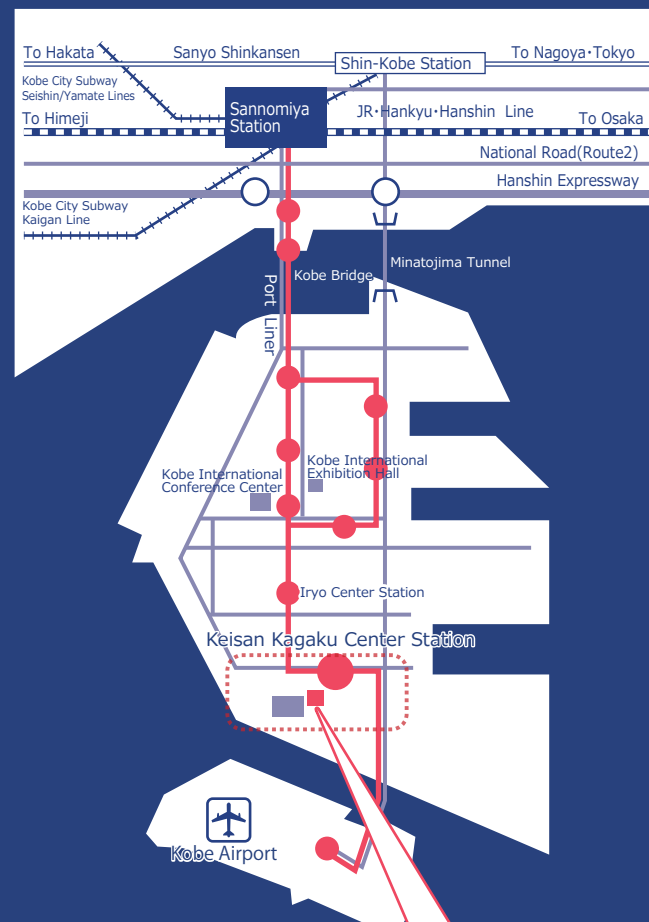


Education and Research Center on Computational Science and Engineering

Graduate School of System Informatics, Kobe University

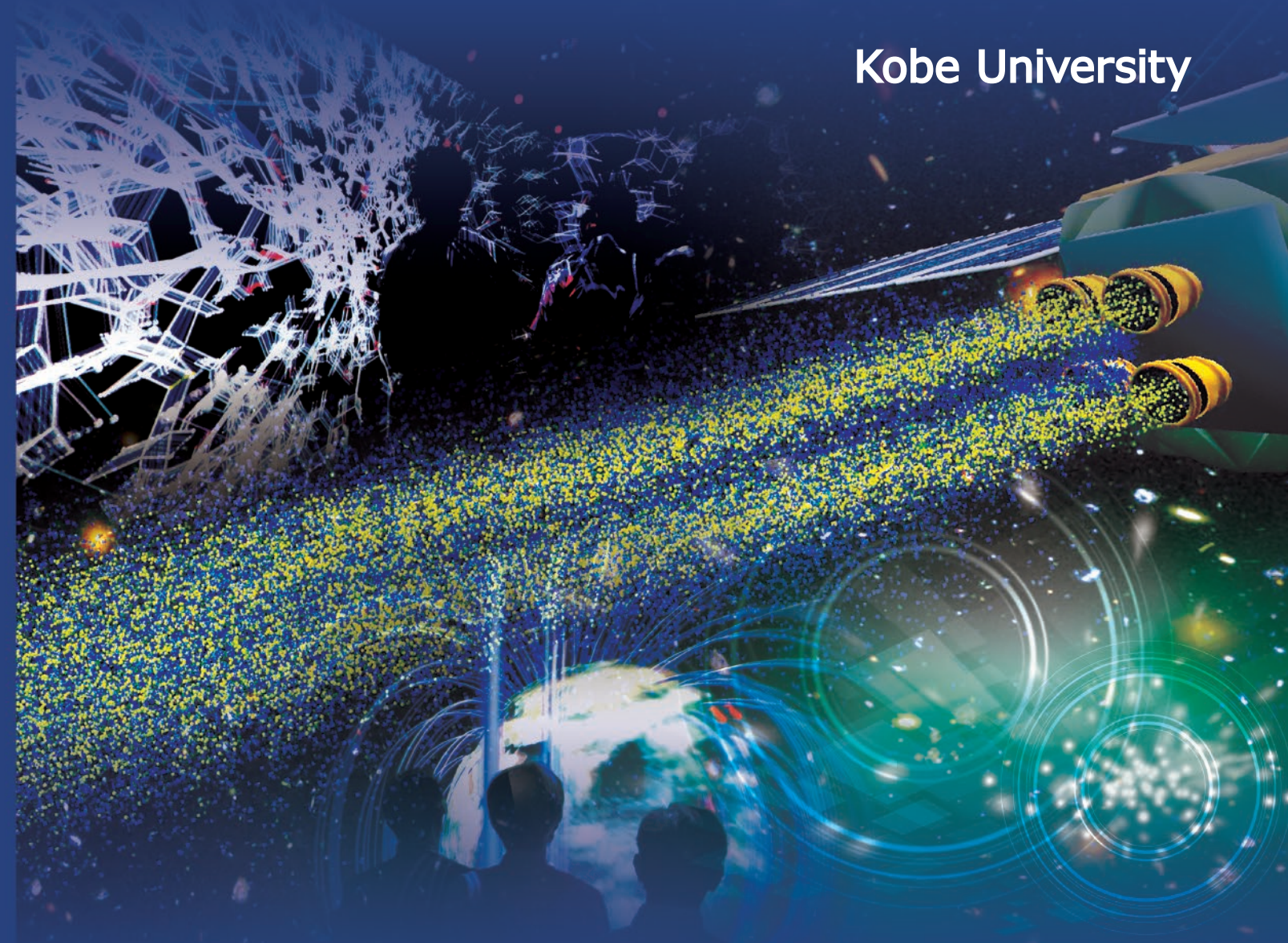
Maps and Directions

At Sannomiya Station of the Port Liner railway,
take a train to Kobe Airport. Get off at Keisan Kagaku
Center Station(travel time: about 15 minutes).
The Center is located just south of the station.



Education and Research Center on
Computational Science and Engineering,
Graduate School of System Informatics
KOBE UNIVERSITY

Integrated Research Center at Kobe University
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Educating researchers and engineers for the next generation of high-performance computing technologies

The Education and Research Center on Computational Science and Engineering (ECCSE), was established in 2014. It promotes research and education in simulation technology and produces skilled researchers and engineers who will shape the next generation of high-performance computing technologies in collaboration with universities, national research institutes, and industries. The center was reorganized as the Education and Research Center on Computational Science and Engineering (ECCSE), Graduate School of System Informatics, in FY2022.

We educate individuals who

- ① understand the principles and value of computational science in problem-solving,
- ② have a wide interdisciplinary knowledge of various computational science fields,
- ③ can handle simulation techniques in various research fields



Remote interactive lectures on “Basis for Computational Life Science”

Remote lectures on computational life science are delivered over the Internet.



university



industry



Intensive courses on parallel computing

Intensive courses on parallel computing for junior researchers are offered in collaboration with RIKEN Center for Computational Science (RIKEN R-CCS) and the University of Hyogo in September every year, as KOBE HPC Summer School.

The courses include hands-on exercises on supercomputer use.



Outreach Activities

With our outreach activities, we aim to cultivate a better understanding of computer simulations among the public, including elementary and middle-school students at the Convention Hall at the Integrated Research Center of Kobe University.



International Collaboration in research and education

To improve simulation knowledge and technologies, a researcher at our institute makes a half-year international exchange research at the University of Oslo, Norway, based on Kobe University Long Term Overseas Visit Program for Young Researchers.

The exchange research covers a broad range of activities, such as writing up international joint papers as well as carrying out workshops, which involve students from both Kobe and Oslo Universities.



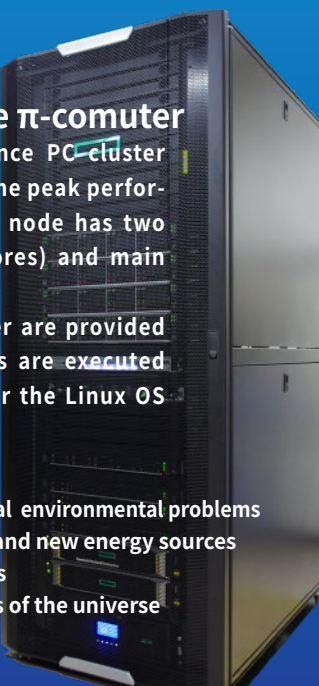
Research Activities with the π -computer

The π -computer is a high-performance PC cluster consisting of 16 compute nodes with the peak performance of 22.9 TFlops. Each compute node has two CPUs (AMD EPYC 7282, 2.8GHz, 16 cores) and main memory of 256 GiB.

Compilers including the Intel compiler are provided to develop various applications. Jobs are executed via the PBS batch job scheduler under the Linux OS (Red Hat Enterprise Linux).

[Principal applications]

- Solutions for disaster mitigation and global environmental problems
- Development of cutting-edge products and new energy sources
- Development of new nanotech materials
- Scientific explanations for the mysteries of the universe
- Development of new drugs



Activities at ECCSE

Past flyers of “Basis for Computational Life Science”

