


























"List of 2024 RIKEN R-CCS Interns acceptance"



Team/Unit		Research subject	Acceptance of interns
Research Teams / Science of Computing			
1	Processor Research Team (Team Leader: Dr.Sano)	 Data-flow architecture (CGRA) for HPC and AI Reconfigurable high-performance computing systems Error correction and control for Fault-Tolerant Quantum Computers	○
2	Large-scale Parallel Numerical Computing Technology Research Team (Team Leader: Dr.Imamura)	 Developing Numerical Libraries for Fast and Reliable Computations towards emerging Supercomputer systems	○
3	Next Generation High Performance Architecture Research Team (Team Leader: Prof.Kondo)	 Exploring Next Generation High Performance Computer Architectures for Post-Moore Era	-
4	High Performance Big Data Research Team (Team Leader: Dr.Sato)	 Developing System Software and Performance Analysis for Large-Scale Simulations, Big Data Processing and Deep Learning	○
5	High Performance Artificial Intelligence Systems Research Team (Team Leader: Dr.Wahib)	 High Performance Artificial Intelligence Systems Intelligent Programming Systems Performance Modeling of AI Systems e.g. Deep Learning Scalable Deep Learning Convergence of AI and Simulation	○
6	Supercomputing Performance Research Team (Team Leader: Dr.Domke)	 Performance Modelling and Predictions Hardware/Software Co-Design for HPC Architecture and Application Evaluations Instrumentation and Monitoring Tools Auto-Tuning and Portability	○
Research Teams / Science by Computing			
7	Field Theory Research Team (Team Leader: Dr.Aoki)	 Utilizing Large-scale Computations to Explore the Fundamental Laws of Elementary Particles	○
8	Discrete Event Simulation Research Team (Team Leader: Dr.Ito)	 Developing technology for massively parallel supercomputers to simulate social phenomena and their applications	○
9	Computational Molecular Science Research Team (Team Leader: Dr.Nakajima)	 Development of Quantum Chemistry Theory and Software Materials Informatics for Energy Materials	○
10	Computational Materials Science Research Team (Team Leader: Dr.Yunoki)	 Simulating Quantum States of Matter by Classical and Quantum Computers, and Development of Quantum Algorithms for Quantum Computing	○
11	Computational Biophysics Research Team (Team Leader: Dr.Sugita)	 Depicting the Motion of a Biomolecule to Detail Its Function	-
12	Computational Climate Science Research Team (Team Leader: Dr.Tomita)	 Developing More Fundamental Climate Models for Improved Climate Simulation	-
13	Complex Phenomena Unified Simulation Research Team (Team Leader: Prof.Tsubokura)	 Programs to Enable the Unified Simulation of Complex Phenomena	○
14	Data Assimilation Research Team (Team Leader: Dr.Miyoshi)	 Data Assimilation as a Bridge between Simulations and the Real World	○
15	Computational Disaster Mitigation and Reduction Research Team (Team Leader: Prof.Oishi)	 Development of Large-scale Numerical Simulations of Multi-hazard Natural Disasters	-
16	Computational Structural Biology Research Team (Team Leader: Prof.Tama)	 Structural Biology Integrating Computation and Experimental Data	○
Operations and Computer Technologies Division			
17	Facility Operations and Development Unit (Unit Leader: Dr.Miura)	 Data center operations Carbon Neutrality PUE (Power Usage Effectiveness)	-
18	System Operations and Development Unit (Unit Leader: Dr.Iguchi)	 High Performance Computing Power Efficiency Job Scheduling	-
19	Software Development Technology Unit (Unit Leader: Dr.Murai)	 HPC Programming Environment HPC application Parallel processing	○
20	HPC Usability Development Unit (Unit Leader: Dr.Shoji)	 Research data management system Large scale data storage Scientific visualization	○
21	Advanced Operation Technologies Unit (Unit Leader: Dr.Yamamoto)	 Data center operations Big data processing Virtualization and containerization	○
HPC- and AI-driven Drug Development Platform Division			
22	HPC- and AI-driven Drug Development Platform Division (Division Director: Prof.Okuno)	 Biomedical Computational Intelligence Medicinal Chemistry Applied AI Molecular Design Computational Intelligence I-driven Drug Discovery Collaborative	-
Quantum-HPC Hybrid Platform Division			
23	Quantum-HPC Hybrid Software Environment Unit (Unit Leader: Prof.Sato)	 Research and development of software stacks for quantum-HPC hybrid computing platform	○
24	Quantum Computing Simulation Unit (Unit Leader: Dr.Ito)	 Development of simulation technology for quantum computers for the "Fugaku" and other HPC system, to accelerate quantum information technologies	○
25	Quantum-HPC Hybrid Platform Operations Unit (Unit Leader: Dr.Miura)	 Operation and its technology development of quantum-HPC hybrid computing platform	-