Multidisciplinary Cooperative Research Program 2023

Report of Contributions

https://project.ccs.tsukuba.ac.jp/e/MCRP2023

Contribution ID : 1 Type : MCRP-S

Study on low-excitation modes of nuclei and their linkage to nucleonic interaction based on self-consistent mean-field theory

Email

nakada@faculty.chiba-u.jp

Number of project members

1

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[wo22i016]

Wisteria: Requested [awarded] budget

[45,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : NAKADA, Hitoshi (Chiba University)

Track Classification : Nuclear Physics（原子核分野）

Contribution ID : 2 Type : MCRP-M

Numerical studies on impact resistance mitigation mechanism using high-strength CNT

Email

tejima@rist.or.jp

Number of project members

10

Cygnus/Pegasus: Project code

[CNTION]

Cygnus/Pegasus: Requested [awarded] budget

[20,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : TEJIMA, Syogo (Research Organization for Information Science and Technology)

Track Classification : Material Science（物質科学分野）

Contribution ID : 3 Type : MCRP-S

Theoretical Studies on the Dynamics of Atoms

Email

tong.xiaomin.ga@u.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[LASER]

Cygnus/Pegasus: Requested [awarded] budget

[4,800]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i009]

Wisteria: Requested [awarded] budget

[12,800]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : TONG, Xiao-Min (Center for Computational Science, University of Tsukuba, Japan)

Track Classification : Material Science(物質科学分野)

Contribution ID : 4 Type : MCRP-S

Theoretical study of self-condensation of intrinsically disordered proteins in dynamic solution environment

Email

noriwo@nagoya-u.jp

Number of project members

1

Cygnus/Pegasus: Project code

[NORYSD22]

Cygnus/Pegasus: Requested [awarded] budget

[3,500]

Cygnus: Requested [awarded] disk capacity (TB)

[2]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Prof. YOSHIDA, Norio (Nagoya University)

Track Classification : Chemistry（化学分野）

Contribution ID : 5 Type : MCRP-S

Giant valley splitting at the Si/SiO2 interface in SIMOX

Email

toshiaki.hayashi.kt@hco.ntt.co.jp

Number of project members

4

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

New [wo23i005]

Wisteria: Requested [awarded] budget

[50,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : Dr HAYASHI, Toshiaki (NTT Basic Research Laboratories); Prof. KAGESHIMA, Hiroyuki (Shimane University); Dr NOBORISAKA, Jinichiro (NTT Basic Research Laboratories); Dr NISHIGUCHI, Katsuhiko (NTT Basic Research Laboratories)

Track Classification : Material Science（物質科学分野）

Contribution ID : 6 Type : MCRP-M

Structural Modeling of Protein-RNA Complexes Based on a Rare Event Sampling Method (PaCS-MD)

Email

ryuhei@ccs.tsukuba.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[LSC]

Cygnus/Pegasus: Requested [awarded] budget

[40,000]

Cygnus: Requested [awarded] disk capacity (TB)

[30]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Dr HARADA, Ryuhei (Center for Computational Sciences, University of Tsukuba)

Track Classification : Life Science（生命分野）

Contribution ID : 7 Type : MCRP-L

Search for physics beyond the standard model from 2+1+1 Flavor Lattice QCD with the Physical Quark Masses

Email

ishikawa@theo.phys.sci.hiroshima-u.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[LATTICE]

Cygnus/Pegasus: Requested [awarded] budget

[120,000] [additional budget granted]

Cygnus: Requested [awarded] disk capacity (TB)

[50]

Pegasus: Requested [awarded] disk capacity (TB)

[50]

Wisteria: Project code

[wo22i010]

Wisteria: Requested [awarded] budget

[550,000]

Wisteria: Requested [awarded] disk capacity (TB)

[100]

Primary author(s) : ISHIKAWA, Ken-Ichi (Hiroshima University)

Track Classification : Particle Physics（素粒子分野）

Contribution ID : 8 Type : MCRP-S

Numerical simulation of mountain waves and turbulence using a high-resolution numerical weather prediction model

Email

nishi@nda.ac.jp

Number of project members

2

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

New [wo23i008]

Wisteria: Requested [awarded] budget

[30,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : NISHI, Akifumi (National Defense Academy of Japan)

Track Classification : Global environment(地球環境分野)

Contribution ID : 9 Type : MCRP-M

Microscopic description of the collective motion of medium-heavy nuclei based on shell-model calculations

Email

shimizu@nucl.ph.tsukuba.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

nuclsm [NUCLSM]

Cygnus/Pegasus: Requested [awarded] budget

[40,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i002]

Wisteria: Requested [awarded] budget

[200,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : SHIMIZU, Noritaka (Center for Computational Sciences, University of Tsukuba)

Track Classification : Nuclear Physics（原子核分野）

Contribution ID : 10 Type : MCRP-L

Calculation of physical quantities of hadrons near physical quark masses from lattice QCD

Email

yamazaki@het.ph.tsukuba.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

[LATNUC]

Cygnus/Pegasus: Requested [awarded] budget

[120,000] [additional budget granted]

Cygnus: Requested [awarded] disk capacity (TB)

[100]

Pegasus: Requested [awarded] disk capacity (TB)

[150]

Wisteria: Project code

[wo22i017]

Wisteria: Requested [awarded] budget

[550,000]

Wisteria: Requested [awarded] disk capacity (TB)

[200]

Primary author(s) : YAMAZAKI, Takeshi (University of Tsukuba)

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 11 Type : MCRP-S

Study on numerical library on many-core/GPU clusters

Email

daisuke@cs.tsukuba.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

[NUMLIB]

Cygnus/Pegasus: Requested [awarded] budget

[10,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i018]

Wisteria: Requested [awarded] budget

[50,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : TAKAHASHI, Daisuke (University of Tsukuba)

Track Classification : High-performance computing system（超高速計算システム分野）

Contribution ID : 12 Type : MCRP-M

QM and MM simulations of the biomolecular chemical reactions

Email

mshoji@ccs.tsukuba.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[CCSPHYSB]

Cygnus/Pegasus: Requested [awarded] budget

[40,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : SHOJI, Mitsuo (Center for Computational Sciences, University of Tsukuba)

Track Classification : Life Science（生命分野）

Contribution ID : 13 Type : MCRP-M

Development and Application of Large-Eddy Simulation Model for Urban Areas

Email

sato.takuto.gu@u.tsukuba.ac.jp

Number of project members

9

Cygnus/Pegasus: Project code

[LES]

Cygnus/Pegasus: Requested [awarded] budget

[24,000]

Cygnus: Requested [awarded] disk capacity (TB)

[50]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i020]

Wisteria: Requested [awarded] budget

[200,000]

Wisteria: Requested [awarded] disk capacity (TB)

[50]

Primary author(s) : SATO, Takuto (Center for Computational Sciences, University of Tsukuba)

Track Classification : Global environment(地球環境分野)

Contribution ID : 14 Type : MCRP-M

Theoretical analysis of geometries, dynamics, and electronic structures involved in protein functions

Email

hori@ccs.tsukuba.ac.jp

Number of project members

9

Cygnus/Pegasus: Project code

[CPMDC]

Cygnus/Pegasus: Requested [awarded] budget

[30,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

New [wo23i014]

Wisteria: Requested [awarded] budget

[50,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : HORI, Yuta (University of Tsukuba); SHIGETA, Yasuteru (Center for Computational Sciences, University of Tsukuba); Ms SATO, Ayaka

Track Classification : Life Science（生命分野）

Contribution ID : 15 Type : MCRP-M

Elucidation of H/D isotope effect in hydrogen-bonded ferroelectrics by developing on-the-fly path integral molecular dynamics

Email

tachi@yokohama-cu.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

New [wo23i015]

Wisteria: Requested [awarded] budget

[200,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : TACHIKAWA, Masanori (Yokohama City University)

Track Classification : Material Science(物質科学分野)

Contribution ID : 16 Type : MCRP-M

Molecular Dynamics Simulation for Rational Drug Discovery and Drug Design

Email

gxuanji@gmail.com

Number of project members

2

Cygnus/Pegasus: Project code

[CADD]

Cygnus/Pegasus: Requested [awarded] budget

[40,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : KUDO, Genki (University of Tsukuba)

Track Classification : Life Science（生命分野）

Contribution ID : 17 Type : MCRP-M

Light Field Generation Methods Using Multiple Omnidirectional Cameras

Email

li.qiaoge@image.iit.tsukuba.ac.jp

Number of project members

2

Cygnus/Pegasus: Project code

[MAGI]

Cygnus/Pegasus: Requested [awarded] budget

10,000 [5,000]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Mr LI, Qiaoge (School of Integrative and Global Majors, Ph.D. Program in Empowerment Informatics, University of Tsukuba); Prof. KITAHARA, Itaru (Center for Computational Sciences)

Track Classification : Computational informatics(計算情報学分野)

Contribution ID : 18 Type : MCRP-L

Nucleon structure from lattice QCD at the physical point

Email

ssasaki@nucl.phys.tohoku.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[NUCLFF]

Cygnus/Pegasus: Requested [awarded] budget

[120,000]

Cygnus: Requested [awarded] disk capacity (TB)

[100]

Pegasus: Requested [awarded] disk capacity (TB)

[200]

Wisteria: Project code

[wo22i013]

Wisteria: Requested [awarded] budget

[550,000]

Wisteria: Requested [awarded] disk capacity (TB)

[200]

Primary author(s) : SASAKI, Shoichi (Tohoku University)

Track Classification : Nuclear Physics（原子核分野）

Contribution ID : 19 Type : MCRP-M

Machine Learning-based (MLD) for Glycan-binding Site Prediction on Siglec Protein

Email

kowith@ccs.tsukuba.ac.jp

Number of project members

8

Cygnus/Pegasus: Project code

[B10SIMJP]

Cygnus/Pegasus: Requested [awarded] budget

40,000 [36,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : HENGPHASATPORN, Kowit (Center for Computational Sciences)

Track Classification : Life Science（生命分野）

Contribution ID : 20 Type : MCRP-M

Optical nonlinearity and electron dynamics simulation of dielectric materials in strong laser field

Email

uemoto@eedept.kobe-u.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[NANOMAT]

Cygnus/Pegasus: Requested [awarded] budget

[4,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i066]

Wisteria: Requested [awarded] budget

[130,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : Dr UEMOTO, Mitsuharu (Kobe University)

Track Classification : Material Science（物質科学分野）

Contribution ID : 21 Type : MCRP-M

Strong CP problem in QCD on the lattice

Email

ryuichiro.kitano@kek.jp

Number of project members

4

Cygnus/Pegasus: Project code

[STRONGCPC]

Cygnus/Pegasus: Requested [awarded] budget

[40,000]

Cygnus: Requested [awarded] disk capacity (TB)

[60]

Pegasus: Requested [awarded] disk capacity (TB)

[60]

Wisteria: Project code

[wo22i021]

Wisteria: Requested [awarded] budget

[100,000]

Wisteria: Requested [awarded] disk capacity (TB)

[60]

Primary author(s) : KITANO, Ryuichiro (KEK)

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 22 Type : MCRP-S

Numerical search of flux-constant states in turbulence

Email

yoshida.kyo.fu@u.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[wo22i022]

Wisteria: Requested [awarded] budget

[48,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : YOSHIDA, Kyo (University of Tsukuba)

Track Classification : Material Science（物質科学分野）

Contribution ID : 23 Type : MCRP-S

Full-Microscopic Calculation of Nuclear Reaction Rate for Astrophysical Phenomena

Email

taniguchi-y@di.kagawa-nct.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[wo22i032]

Wisteria: Requested [awarded] budget

[50,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : Dr TANIGUCHI, Yasutaka (National Institute of Technology (KOSEN), Kagawa College)

Track Classification : Nuclear Physics（原子核分野）

Contribution ID : 24 Type : MCRP-S

Numerical study of compact binary formation in dense star clusters

Email

tanikawa@ea.c.u-tokyo.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[TRANSIENT]

Cygnus/Pegasus: Requested [awarded] budget

[10,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : TANIKAWA, Ataru

Track Classification : Astrophysics（宇宙分野）

Contribution ID : 25 Type : MCRP-M

Simulation of molecular evolution focused on the dynamics of proteins

Email

morita@ccs.tsukuba.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

[MOLBIO]

Cygnus/Pegasus: Requested [awarded] budget

[39,600]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : MORITA, Rikuri (University of Tsukuba)

Track Classification : Life Science（生命分野）

Contribution ID : 26 Type : MCRP-L

Topological excitation of QCD near the critical temperature

Email

hfukaya@het.phys.sci.osaka-u.ac.jp

Number of project members

8

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[wo22i038]

Wisteria: Requested [awarded] budget

[532,000]

Wisteria: Requested [awarded] disk capacity (TB)

[50]

Primary author(s) : FUKAYA, Hidenori

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 27 Type : MCRP-M

Studies on extreme weather and climate using convection-permitting regional climate models

Email

doan.van.gb@u.tsukuba.ac.jp

Number of project members

15

Cygnus/Pegasus: Project code

No [REGCLIM]

Cygnus/Pegasus: Requested [awarded] budget

[10,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i039]

Wisteria: Requested [awarded] budget

[100,000]

Wisteria: Requested [awarded] disk capacity (TB)

[202]

Primary author(s) : Dr DOAN, Quang Van (Center for Computational Sciences)

Track Classification : Global environment(地球環境分野)

Contribution ID : 28 Type : MCRP-M

First principles study on impurity systems

Email

harashima.yosuke@ms.naist.jp

Number of project members

7

Cygnus/Pegasus: Project code

[FPIS]

Cygnus/Pegasus: Requested [awarded] budget

[10,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : HARASHIMA, Yosuke (Nara Institute of Science and Technology); SHIGETA, Yasuteru (Center for Computational Sciences, University of Tsukuba); Dr

KOGA, Hiroaki (RIST); Dr KATOUDA, Michio (RIST); Dr YONEHARA, Takehiro (RIST); SI, MRINAL KANTI (UNIVERSITY OF TSUKUBA); MATSUI, Masafuyu (University of Tsukuba)

Track Classification : Material Science（物質科学分野）

Contribution ID : 29 Type : MCRP-M

Theoretical investigation of molecular mechanisms of electron, proton and energy transfer reactions in proteins

Email

ksaito@appchem.t.u-tokyo.ac.jp

Number of project members

11

Cygnus/Pegasus: Project code

[PROTEIN]

Cygnus/Pegasus: Requested [awarded] budget

[40,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

wo22i035 [No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : SAITO, Keisuke (University of Tokyo)

Track Classification : Life Science（生命分野）

Contribution ID : 30 Type : MCRP-M

Development of machine learning based systems for supporting sleep diagnosis and treatment

Email

horie@cs.tsukuba.ac.jp

Number of project members

10

Cygnus/Pegasus: Project code

[SLEEP]

Cygnus/Pegasus: Requested [awarded] budget

[6,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : HORIE, Kazumasa (University of Tsukuba)

Track Classification : Computational informatics(計算情報学分野)

Contribution ID : 31 Type : MCRP-M

Development of the near-infrared imaging technique for cerebral hemorrhage by radiative transfer calculations

Email

yajima@ccs.tsukuba.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

[RT810IMG]

Cygnus/Pegasus: Requested [awarded] budget

[10,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i019]

Wisteria: Requested [awarded] budget

150000 [135,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : YAJIMA, Hidenobu; Dr ABE, Makito (University of Tsukuba); Dr TAKAMIZU, Yuichi (University of Tsukuba); Mr SOGA, Kenta (University of Tsukuba); Prof. FUKUSHIMA, Hajime (University of Tsukuba); Mr ICHIMURA, Issei (University of Tsukuba)

Track Classification : Astrophysics（宇宙分野）

Contribution ID : 32 Type : MCRP-S

Lightweight Data Sharing among HPC Applications with Approximate Computing

Email

yasutaka.wada@meisei-u.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[ACDS]

Cygnus/Pegasus: Requested [awarded] budget

[10,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

New [wo23i032]

Wisteria: Requested [awarded] budget

[50,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : WADA, Yasutaka (Meisei University)

Track Classification : High-performance computing system（超高速計算システム分野）

Contribution ID : 33 Type : MCRP-M

Novel structure analysis method for two-dimensional material by massively parallel data-driven science

Email

hoshi@tottori-u.ac.jp

Number of project members

9

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[wo22i069]

Wisteria: Requested [awarded] budget

200,000 [220,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : Prof. HOSHI, Takeo (Tottori University)

Track Classification : Material Science（物質科学分野）

Contribution ID : 34 Type : MCRP-S

Proton-emitting radioactivity and spin-dependent excitations of atomic nuclei

Email

gz2r2dhh@gmail.com

Number of project members

1

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

xg21i064 [wo23i034]

Wisteria: Requested [awarded] budget

[30,000]

Wisteria: Requested [awarded] disk capacity (TB)

[2]

Primary author(s) : OISHI, TOMOHIRO (University of Zagreb)

Track Classification : Nuclear Physics（原子核分野）

Contribution ID : 35 Type : MCRP-M

First Principles study and machine learning approach to study of ZrO2/HfO2 nanolaminates to use in advanced transistors and capacitors

Email

mrinalchem@gmail.com

Number of project members

1

Cygnus/Pegasus: Project code

[FPISM12]

Cygnus/Pegasus: Requested [awarded] budget

30,000 [27,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : SI, MRINAL KANTI (UNIVERSITY OF TSUKUBA)

Track Classification : Material Science（物質科学分野）

Contribution ID : 36 Type : MCRP-M

Improvement of first-principles calculation code RSPACE and investigation of transport property at device interfaces

Email

t.ono@eedept.kobe-u.ac.jp

Number of project members

9

Cygnus/Pegasus: Project code

[RSPACE]

Cygnus/Pegasus: Requested [awarded] budget

21,000 [23,100]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i057]

Wisteria: Requested [awarded] budget

200,000 [220,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : ONO, Tomoya (Kobe University)

Track Classification : Material Science（物質科学分野）

Contribution ID : 37 Type : MCRP-M

Particle Physics with Tensor Network Scheme

Email

kuramasi@het.ph.tsukuba.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

[TRG]

Cygnus/Pegasus: Requested [awarded] budget

40,000 [36,000] [additional budget granted]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i012]

Wisteria: Requested [awarded] budget

[200,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : KURAMASHI, Yoshinobu

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 38 Type : MCRP-M

Development of large-scale parallel numerical linear algebra algorithms and machine learning methods based on spectral framework

Email

sakurai@cs.tsukuba.ac.jp

Number of project members

15

Cygnus/Pegasus: Project code

[NGNAS]

Cygnus/Pegasus: Requested [awarded] budget

[5,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i028]

Wisteria: Requested [awarded] budget

250,000 [175,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : SAKURAI, Tetsuya (University of Tsukuba)

Track Classification : Numerical analysis(数値解析分野)

Contribution ID : 39 Type : MCRP-S

Parallel Game Tree Search for Complete Analysis of 8x8 Othello

Email

yamana.takuto.rg@alumni.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[NYANYAN]

Cygnus/Pegasus: Requested [awarded] budget

[6,870]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : YAMANA, Takuto (University of Tsukuba)

Track Classification : Computational informatics(計算情報学分野)

Contribution ID : 40 Type : MCRP-S

Development of radiation hydrodynamics code for simulations of star cluster formation

Email

fukushima@ccs.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[RHD4SCGPU]

Cygnus/Pegasus: Requested [awarded] budget

[7,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : FUKUSHIMA, Hajime

Track Classification : Astrophysics（宇宙分野）

Contribution ID : 41 Type : MCRP-M

N-body simulations of the Galactic disk perturbed by the satellites

Email

t.asano@astron.s.u-tokyo.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

[MWDWARFS]

Cygnus/Pegasus: Requested [awarded] budget

[22,000]

Cygnus: Requested [awarded] disk capacity (TB)

[30]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : ASANO, Tetsuro (The University of Tokyo)

Track Classification : Astrophysics（宇宙分野）

Contribution ID : 42 Type : MCRP-S

Implementation of Lattice QCD common code to large scale parallel supercomputer with SIMD and GPU architecture

Email

hidekatsu.nemura@rcnp.osaka-u.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[BRIDGE]

Cygnus/Pegasus: Requested [awarded] budget

[3,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i060]

Wisteria: Requested [awarded] budget

[32,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : NEMURA, Hidekatsu (Research Center for Nuclear Physics, Osaka University)

Track Classification : Particle Physics（素粒子分野）

Contribution ID : 43 Type : MCRP-S

Development of a hierarchical parallel numerical algorithm for saddle point problems

Email

tadano@cs.tsukuba.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[HPNA4SPP]

Cygnus/Pegasus: Requested [awarded] budget

[9,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i040]

Wisteria: Requested [awarded] budget

[20,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : TADANO, Hiroto (Center for Computational Sciences, University of Tsukuba)

Track Classification : Numerical analysis(数値解析分野)

Contribution ID : 44 Type : MCRP-M

Developments of Efficient Sampling Methods for Exploring Protein Structures with Structural Validation

Email

takunoriyasuda@gmail.com

Number of project members

5

Cygnus/Pegasus: Project code

[BIOSIM]

Cygnus/Pegasus: Requested [awarded] budget

[40,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : YASUDA, Takunori (University of Tsukuba)

Track Classification : Life Science（生命分野）

Contribution ID : 45 Type : MCRP-M

Non-perturbative renormalization for nucleon structure in lattice QCD

Email

tsuji@nucl.phys.tohoku.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[NUCLRE]

Cygnus/Pegasus: Requested [awarded] budget

[25,000]

Cygnus: Requested [awarded] disk capacity (TB)

[52]

Pegasus: Requested [awarded] disk capacity (TB)

[52]

Wisteria: Project code

[wo22i058]

Wisteria: Requested [awarded] budget

[200,000]

Wisteria: Requested [awarded] disk capacity (TB)

[52]

Primary author(s) : TSUJI, Ryutaro

Co-author(s) : SASAKI, Shoichi (Tohoku University); SHINTANI, Eigo (Tsukuba Univ.); Dr AOKI, Yasumichi (RIKEN Center for Computational Science)

Track Classification : Particle Physics（素粒子分野）

Contribution ID : 46 Type : MCRP-FPGA

Evaluation of Matrix Multiplication in Various Precision Arithmetic

Email

nakasato@u-aizu.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[HPFP]

Cygnus/Pegasus: Requested [awarded] budget

[5,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Prof. NAKASATO, Naohito (University of Aizu)

Track Classification : High-performance computing system（超高速計算システム分野）

Contribution ID : 47 Type : MCRP-M

Galaxy Formation in the Early Universe

Email

kohji@ccs.tsukuba.ac.jp

Number of project members

33

Cygnus/Pegasus: Project code

[RTRHD]

Cygnus/Pegasus: Requested [awarded] budget

22,000 [17,600]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i006]

Wisteria: Requested [awarded] budget

[82,000]

Wisteria: Requested [awarded] disk capacity (TB)

[40]

Primary author(s) : YOSHIKAWA, Kohji (Center for Computational Sciences, University of Tsukuba)

Track Classification : Astrophysics（宇宙分野）

Contribution ID : 48 Type : MCRP-L

Thermodynamics of 2+1 flavor QCD with the gradient-flow

Email

kanaya@ccs.tsukuba.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[WHOTSPOTC]

Cygnus/Pegasus: Requested [awarded] budget

115,000 [80,500]

Cygnus: Requested [awarded] disk capacity (TB)

[20]

Pegasus: Requested [awarded] disk capacity (TB)

[20]

Wisteria: Project code

wo22i046 [No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : KANAYA, Kazuyuki (Univ. of Tsukuba)

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 49 Type : MCRP-S

Stability evaluation system for membrane protein using 3D-RISM theory

Email

ayori@meiji.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[PRORISM]

Cygnus/Pegasus: Requested [awarded] budget

[7,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Dr MITSUTAKE, Ayori (Meiji Univ.)

Track Classification : Life Science（生命分野）

Contribution ID : 50 Type : MCRP-L

B meson physics from lattice QCD for search of new physics

Email

takashi.kaneko@kek.jp

Number of project members

5

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

[wo22i049]

Wisteria: Requested [awarded] budget

[524,000]

Wisteria: Requested [awarded] disk capacity (TB)

[30]

Primary author(s) : KANEKO, Takashi (KEK)

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 51 Type : MCRP-S

Quantum dynamics in nuclei and neutron stars

Email

nakatsukasa@nucl.ph.tsukuba.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[NUCLDFT]

Cygnus/Pegasus: Requested [awarded] budget

[3,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i001]

Wisteria: Requested [awarded] budget

[50,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : NAKATSUKASA, Takashi (University of Tsukuba)

Track Classification : Nuclear Physics（原子核分野）

Contribution ID : 52 Type : MCRP-M

First-principles calculations for light-matter interaction in novel 2D materials and solid thin films

Email

yamada.shunsuke@qst.go.jp

Number of project members

4

Cygnus/Pegasus: Project code

tddftsy [TDDFTSY]

Cygnus/Pegasus: Requested [awarded] budget

[30,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i043]

Wisteria: Requested [awarded] budget

[200,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : YAMADA, Shunsuke (Kansai Photon Science Institute, National Institutes for Quantum Science and Technology)

Track Classification : Material Science（物質科学分野）

Contribution ID : 53 Type : MCRP-M

First-principles calculation of optical response of meta- and bulk surfaces

Email

yabana@nucl.ph.tsukuba.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[TDDFT]

Cygnus/Pegasus: Requested [awarded] budget

3,000 [3,300]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i063]

Wisteria: Requested [awarded] budget

200,000 [220,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : YABANA, Kazuhiro

Track Classification : Material Science（物質科学分野）

Contribution ID : 54 Type : MCRP-M

Formation and evolution of local galaxies

Email

mmori@ccs.tsukuba.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[GALAXY]

Cygnus/Pegasus: Requested [awarded] budget

[15,000]

Cygnus: Requested [awarded] disk capacity (TB)

[150]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i023]

Wisteria: Requested [awarded] budget

[250,000]

Wisteria: Requested [awarded] disk capacity (TB)

[150]

Primary author(s) : MORI, Masao (University of Tsukuba)

Track Classification : Astrophysics（宇宙分野）

Contribution ID : 55 Type : MCRP-M

Implementation and Evaluation of Reduced-/ Extended-Precision BLAS Routines on CPUs/GPUs/ FPGAs

Email

imamura.toshiyuki@riken.jp

Number of project members

6

Cygnus/Pegasus: Project code

[LSPANC]

Cygnus/Pegasus: Requested [awarded] budget

[19,000]

Cygnus: Requested [awarded] disk capacity (TB)

[1]

Pegasus: Requested [awarded] disk capacity (TB)

[1]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : IMAMURA, Toshiyuki (RIKEN Center for Computational Science)

Track Classification : Computational informatics（計算情報学分野）

Contribution ID : 56 Type : MCRP-M

General relativistic radiation magnetohydrodynamics simulations of black hole accretion flows and outflows

Email

asahinyt@ccs.tsukuba.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

grrmhdBH [GRRMHDBH]

Cygnus/Pegasus: Requested [awarded] budget

[3,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i055]

Wisteria: Requested [awarded] budget

[200,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : ASAHINA, Yuta

Track Classification : Astrophysics（宇宙分野）

Contribution ID : 57 Type : MCRP-S

Learning particle method simulation for solid and fluid mechanics

Email

nishio@kz.tsukuba.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

[DAISM]

Cygnus/Pegasus: Requested [awarded] budget

10000 [9,000]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

New [wo23i057]

Wisteria: Requested [awarded] budget

5000 [4,500]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : Prof. NISHIO, Mayuko (University of Tsukuba)

Track Classification : Numerical analysis(数値解析分野)

Contribution ID : 58 Type : MCRP-L

First-principles Lattice QCD calculation of Hadron interactions

Email

doi@ribf.riken.jp

Number of project members

14

Cygnus/Pegasus: Project code

[HALQCD]

Cygnus/Pegasus: Requested [awarded] budget

[9,400]

Cygnus: Requested [awarded] disk capacity (TB)

[70]

Pegasus: Requested [awarded] disk capacity (TB)

[70]

Wisteria: Project code

[wo22i065]

Wisteria: Requested [awarded] budget

[537,300]

Wisteria: Requested [awarded] disk capacity (TB)

[30]

Primary author(s) : DOI, Takumi (RIKEN)

Track Classification : Nuclear Physics（原子核分野）

Contribution ID : 59 Type : MCRP-FPGA

HPC application and system software development on FPGA-GPU combined platform

Email

taisuke@ccs.tsukuba.ac.jp

Number of project members

15

Cygnus/Pegasus: Project code

[CCUSC]

Cygnus/Pegasus: Requested [awarded] budget

10,000 [11,000]

Cygnus: Requested [awarded] disk capacity (TB)

[2] [update 10]

Pegasus: Requested [awarded] disk capacity (TB)

[2]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Prof. BOKU, Taisuke (University of Tsukuba)

Track Classification : High-performance computing system（超高速計算システム分野）

Contribution ID : 60 Type : MCRP-S

Deep learning based planning system of radiotherapy for head and neck cancer

Email

sho.ozaki@hirosaki-u.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

DLHnN [DLHNN]

Cygnus/Pegasus: Requested [awarded] budget

5,000 [4,500]

Cygnus: Requested [awarded] disk capacity (TB)

[3]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Dr OZAKI, Sho (Hirosaki University)

Track Classification : Computational informatics(計算情報学分野)

Contribution ID : 61 Type : MCRP-M

Theoretical analysis on strong-field induced phenomena in semiconductors

Email

ssato@ccs.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[ATTOQD]

Cygnus/Pegasus: Requested [awarded] budget

[1,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i026]

Wisteria: Requested [awarded] budget

[199,800]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : SATO, Shunsuke (University of Tsukuba)

Track Classification : Material Science(物質科学分野)

Contribution ID : 62 Type : MCRP-S

Radiomics feature extraction from medical images and visualization of time-series state transition

Email

meg.riken.mgm@gmail.com

Number of project members

2

Cygnus/Pegasus: Project code

[JUNTENMP]

Cygnus/Pegasus: Requested [awarded] budget

[5,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : OYA, Megumi (RIKEN)

Track Classification : Computational informatics(計算情報学分野)

Contribution ID : 63 Type : MCRP-S

Joint Reconstruction and Registration of Bones from X-Ray Images

Email

shrestha.pragyan@image.iit.tsukuba.ac

Number of project members

3

Cygnus/Pegasus: Project code

[JRR23]

Cygnus/Pegasus: Requested [awarded] budget

[3,200]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : SHRESTHA, Pragyan (University of Tsukuba)

Track Classification : Computational informatics(計算情報学分野)

Contribution ID : 64 Type : MCRP-S

Theory of electronic devices by large-scale first-principles charge transport calculations

Email

nkoba@bk.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[CMSLAB]

Cygnus/Pegasus: Requested [awarded] budget

10000 [9,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

New [wo23i064]

Wisteria: Requested [awarded] budget

50000 [45,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : KOBAYASHI, Nobuhiko (Univ Tsukuba)

Track Classification : Material Science(物質科学分野)

Contribution ID : 65 Type : MCRP-S

Evaluation of nuclear matrix element of neutrinoless double-beta decay using the proton-neutron finite-amplitude method

Email

hinohara@nucl.ph.tsukuba.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

[GCM]

Cygnus/Pegasus: Requested [awarded] budget

[1,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i024]

Wisteria: Requested [awarded] budget

[50,000]

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : Dr HINOHARA, Nobuo (University of Tsukuba)

Track Classification : Nuclear Physics（原子核分野）

Contribution ID : 66 Type : MCRP-FPGA

Development of Computing Platform based on Transprecision and Inter-GPU Streaming Mechanism for HPC

Email

hanawa@cc.u-tokyo.ac.jp

Number of project members

16

Cygnus/Pegasus: Project code

[CSPP]

Cygnus/Pegasus: Requested [awarded] budget

[8,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Prof. HANAWA, Toshihiro (The University of Tokyo)

Track Classification : High-performance computing system（超高速計算システム分野）

Contribution ID : 67 Type : MCRP-M

Ground-state phase diagram and finite-temperature effects of J-K-Γ model on a hyperhoneycomb lattice

Email

k.fukui@aion.t.u-tokyo.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[FRGQSL]

Cygnus/Pegasus: Requested [awarded] budget

40,000 [28,000]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i072]

Wisteria: Requested [awarded] budget

[200,000]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : FUKUI, Kiyu (The University of Tokyo)

Track Classification : Material Science（物質科学分野）

Contribution ID : 68 Type : MCRP-M

Large vision and language representation learning with local-feature alignment

Email

suganuma@vision.is.tohoku.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[VL2023]

Cygnus/Pegasus: Requested [awarded] budget

40,000 [28,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[20]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : SUGANUMA, Masanori (Tohoku University)

Track Classification : Computational informatics(計算情報学分野)

Contribution ID : 69 Type : MCRP-S

Research on Remote Sensing Image Data Analysis Using Machine Learning

Email

toriya@gipc.akita-u.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[CVGEO]

Cygnus/Pegasus: Requested [awarded] budget

[6,000]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : Dr TORIYA, Hisatoshi (Akita University)

Co-author(s) : Prof. KITAHARA, Itaru (Center for Computational Sciences)

Track Classification : Computational informatics(計算情報学分野)

Contribution ID : 70 Type : MCRP-M

Lattice Study on the quark confinement based on the gauge-covariant decomposition

Email

akihiro.shibata@kek.jp

Number of project members

5

Cygnus/Pegasus: Project code

[QCONFINE]

Cygnus/Pegasus: Requested [awarded] budget

40,000 [36,000]

Cygnus: Requested [awarded] disk capacity (TB)

[20]

Pegasus: Requested [awarded] disk capacity (TB)

[20]

Wisteria: Project code

[wo22i071]

Wisteria: Requested [awarded] budget

200,000 [180,000}

Wisteria: Requested [awarded] disk capacity (TB)

[25]

Primary author(s) : SHIBATA, Akihiro (KEK)

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 71 Type : MCRP-M

Molecular Dynamics study for 3-Dimensional Domain Swapping

Email

simoyama@ccs.tsukuba.ac.jp” <simoyama@ccs.tsukuba

Number of project members

1

Cygnus/Pegasus: Project code

[MSDCMD]

Cygnus/Pegasus: Requested [awarded] budget

40,000 [25,200]

Cygnus: Requested [awarded] disk capacity (TB)

[5]

Pegasus: Requested [awarded] disk capacity (TB)

[5]

Wisteria: Project code

[wo22i073]

Wisteria: Requested [awarded] budget

200,000 [180,000}

Wisteria: Requested [awarded] disk capacity (TB)

[5]

Primary author(s) : Dr SHIMOYAMA, Hiromitsu (University of Tsukuba)

Track Classification : Life Science（生命分野）

Contribution ID : 72 Type : MCRP-M

First-principles study on water molecules on metal surfaces and solid/liquid interfaces

Email

otani@ccs.tsukuba.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[EIS00001]

Cygnus/Pegasus: Requested [awarded] budget

[11,000]

Cygnus: Requested [awarded] disk capacity (TB)

[10]

Pegasus: Requested [awarded] disk capacity (TB)

[10]

Wisteria: Project code

[wo22i030]

Wisteria: Requested [awarded] budget

173,000 [121,100]

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : Prof. OTANI, Minoru (Tsukuba University)

Track Classification : Material Science(物質科学分野)

Contribution ID : 73 Type : MCRP-M

Research of System Software for HPC and Big Data AI

Email

tatebe@cs.tsukuba.ac.jp

Number of project members

15

Cygnus/Pegasus: Project code

[NBB]

Cygnus/Pegasus: Requested [awarded] budget

[40,000] [additional budget granted]

Cygnus: Requested [awarded] disk capacity (TB)

[20]

Pegasus: Requested [awarded] disk capacity (TB)

[100]

Wisteria: Project code

[No]

Wisteria: Requested [awarded] budget

[0]

Wisteria: Requested [awarded] disk capacity (TB)

[0]

Primary author(s) : TATEBE, Osamu (University of Tsukuba)

Track Classification : High-performance computing system（超高速計算システム分野）

Contribution ID : 74 Type : MCRP-M

Design of metalens by using large-scale electromagnetic analysis and machine learning

Email

takashi.takeuchi.gj@riken.jp

Number of project members

2

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested [awarded] budget

[0]

Cygnus: Requested [awarded] disk capacity (TB)

[0]

Pegasus: Requested [awarded] disk capacity (TB)

[0]

Wisteria: Project code

New [wo23i074]

Wisteria: Requested [awarded] budget

200,000 [180,000}

Wisteria: Requested [awarded] disk capacity (TB)

[15]

Primary author(s) : TAKEUCHI, Takashi (RIKEN)

Track Classification : Material Science（物質科学分野）