

Multidisciplinary Cooperative Research Program 2024



Report of Contributions

Contribution ID : 1

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 budget

3000 [1960]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i001]

Wisteria: Requested budget

50000 [40000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygnus: awarded NH product

1000 [560]

Pegasus: awarded NH product

1000 [700]

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

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 2

Type : MCRP-M

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

Email

noriwo@nagoya-u.jp

Number of project members

2

Cygnus/Pegasus: Project code

[NORYSD22]

Cygnus/Pegasus: Requested budget

5000 [3600]

Cygnus: Requested disk capacity (TB)

[8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

0 [0]

Pegasus: awarded NH product

2500 [1800]

Primary author(s) : Prof. YOSHIDA, Norio (Nagoya University); Dr MARUYAMA, Yutaka (The Institute of Statistical Mathematics)

Track Classification : Chemistry(化学分野)

Contribution ID : 3

Type : MCRP-S

Numerical study of black hole binary formation in massive open clusters

Email

tanik@g.fpu.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[TRANSIENT]

Cygnus/Pegasus: Requested budget

10000 [9000]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

5000 [4000]

Pegasus: awarded NH product

2500 [2500]

Primary author(s) : TANIKAWA, Ataru (Fukui Prefectural University)

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 4

Type : MCRP-S

Application of data-driven molecular dynamics simulation to astrobiology

Email

hori@ccs.tsukuba.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[CPMDC]

Cygnus/Pegasus: Requested budget

10000 [2592]

Cygnus: Requested disk capacity (TB)

[4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

5000 [1152]

Pegasus: awarded NH product

2500 [720]

Primary author(s) : HORI, Yuta (University of Tsukuba)

Track Classification : Life Science(生命分野)

Contribution ID : 5

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

7

Cygnus/Pegasus: Project code

[NUCLSM]

Cygnus/Pegasus: Requested budget

40000 [36000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i002]

Wisteria: Requested budget

200000 [144000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygnus: awarded NH product

[0]

Pegasus: awarded NH product

20000 [18000]

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

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 6

Type : MCRP-S

Development of machine learning codes for gravitational wave analysis

Email

motohashi@cc.kogakuin.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

[ML4GW]

Cygnus/Pegasus: Requested budget

10000 [8100]

Cygnus: Requested disk capacity (TB)

[2.5]

Pegasus: Requested disk capacity (TB)

[2.5]

Wisteria: Project code

New [wo24i006]

Wisteria: Requested budget

10000 [7200]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH product

5000 [3600]

Pegasus: awarded NH product

2500 [2250]

Primary author(s) : Prof. MOTOHASHI, Hayato (Kogakuin University)

Track Classification : Astrophysics(宇宙分野)

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

5

Cygnus/Pegasus: Project code

[LATTICE]

Cygnus/Pegasus: Requested budget

150000 [174000]

Cygnus: Requested disk capacity (TB)

50 [45]

Pegasus: Requested disk capacity (TB)

100 [100]

Wisteria: Project code

[wo22i010]

Wisteria: Requested budget

500000 [500000]

Wisteria: Requested disk capacity (TB)

100 [90]

Cygnus: awarded NH product

30000 [30000]

Pegasus: awarded NH product

60000 [72000]

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

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 8

Type : MCRP-M

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 budget

150000 [32000]

Cygnus: Requested disk capacity (TB)

100 [85]

Pegasus: Requested disk capacity (TB)

200 [200]

Wisteria: Project code

[wo22i013]

Wisteria: Requested budget

500000 [160000]

Wisteria: Requested disk capacity (TB)

200 [170]

Cygsus: awarded NH produt

30000 [6400]

Pegasus: awarded NH product

60000 [12800]

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

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 9

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

5

Cygnus/Pegasus: Project code

[LES]

Cygnus/Pegasus: Requested budget

24000 [17280]

Cygnus: Requested disk capacity (TB)

50 [42.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i020]

Wisteria: Requested budget

200000 [160000]

Wisteria: Requested disk capacity (TB)

50 [42.5]

Cygsus: awarded NH produt

12000 [7680]

Pegasus: awarded NH product

6000 [4800]

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

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

Contribution ID : 10

Type : MCRP-M

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 budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[wo22i022]

Wisteria: Requested budget

96000 [69120]

Wisteria: Requested disk capacity (TB)

10 [8.5]

Cygnus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

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

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

Contribution ID : 11

Type : MCRP-M

Theoretical study of chemical reactions in solution and biomolecules

Email

toshi_mori@cm.kyushu-u.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

MoriLab [MORILAB]

Cygnus/Pegasus: Requested budget

24000 [19440]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

12000 [9720]

Primary author(s) : MORI, Toshifumi (Kyushu University)

Track Classification : Chemistry(化学分野)

Contribution ID : 12

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 budget

40000 [48000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i012]

Wisteria: Requested budget

200000 [160000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygnus: awarded NH product

[0]

Pegasus: awarded NH product

20000 [24000]

Primary author(s) : KURAMASHI, Yoshinobu

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 13

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 budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[wo22i016]

Wisteria: Requested budget

40000 [22400]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

[0]

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

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 14

Type : MCRP-M

Elucidating the Zn²⁺ permeation pathway through the transient receptor potential 6 (TRPC6) ion channel: A molecular dynamic simulation

Email

sirins@ccs.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

No [SSCCS]

Cygnus/Pegasus: Requested budget

40000 [22400]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

10000 [6400]

Pegasus: awarded NH product

10000 [8000]

Primary author(s) : SITTIWANICHAJ, Sirin (University of Tsukuba)

Track Classification : Chemistry(化学分野)

Contribution ID : 15

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 budget

150000 [178000]

Cygnus: Requested disk capacity (TB)

100 [90]

Pegasus: Requested disk capacity (TB)

[150]

Wisteria: Project code

[wo22i017]

Wisteria: Requested budget

[500000]

Wisteria: Requested disk capacity (TB)

200 [180]

Cygsus: awarded NH produt

[10000]

Pegasus: awarded NH product

70000 [84000]

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

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 17

Type : MCRP-S

Molecular Simulation Analyses for Dissolution Behavior of Model Proteins in Ionic Liquid Aqueous Solution

Email

ayamada@nda.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[IL]

Cygnus/Pegasus: Requested budget

10000 [8000]

Cygnus: Requested disk capacity (TB)

6 [4.8]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

10000 [8000]

Pegasus: awarded NH product

[0]

Primary author(s) : Prof. YAMADA, Atsushi (National Defense Academy of Japan)

Track Classification : Chemistry(化学分野)

Contribution ID : 18

Type : MCRP-M

Molecular Simulation Method for Analyzing Biological Functions Conjugated with Structural Changes and Chemical Reactions

Email

ryuhei@ccs.tsukuba.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[LSC]

Cygnus/Pegasus: Requested budget

40000 [39600]

Cygnus: Requested disk capacity (TB)

35 [29.75]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

20000 [17600]

Pegasus: awarded NH product

10000 [11000]

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

Track Classification : Life Science(生命分野)

Contribution ID : 19

Type : MCRP-M

Generating seeing-degraded images of the Sun using diffusion models

Email

hirashima-keiya096@g.ecc.u-tokyo.ac.jp

Number of project members

2

Cygnus/Pegasus: Project code

[SOLAR]

Cygnus/Pegasus: Requested budget

[20000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

[10000]

Primary author(s) : HIRASHIMA, Keiya (University of Tokyo)

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 20

Type : MCRP-M

Establishing Methods for Modeling Neutral Gas Flows towards the Realization of a Numerical Vacuum Chamber

Email

knishii@tmu.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

kn2024 [KN2024]

Cygnus/Pegasus: Requested budget

[40000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

[0]

Pegasus: awarded NH product

[20000]

Primary author(s) : NISHII, Keita (Tokyo Metropolitan University)

Track Classification : Numerical analysis(数值解析分野)

Contribution ID : 21

Type : MCRP-M

Molecular Dynamics Simulation for Rational Drug Discovery and Drug Design

Email

gxuanji@gmail.com

Number of project members

4

Cygnus/Pegasus: Project code

[CADD]

Cygnus/Pegasus: Requested budget

40000 [30600]

Cygnus: Requested disk capacity (TB)

20 [17]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

30000 [21600]

Pegasus: awarded NH product

5000 [4500]

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

Track Classification : Life Science(生命分野)

Contribution ID : 22

Type : MCRP-M

Virtual Cyclic Peptide Generation using DL Model Construction

Email

kowith@ccs.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[B10SIMJP]

Cygnus/Pegasus: Requested budget

40000 [20160]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

20000 [8960]

Pegasus: awarded NH product

10000 [5600]

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

Track Classification : Life Science(生命分野)

Contribution ID : 23

Type : MCRP-M

First-principles calculations for nonlinear excitation and laser ablation of nano-scale thin films

Email

yamada.shunsuke@qst.go.jp

Number of project members

4

Cygnus/Pegasus: Project code

[TDDFTSY]

Cygnus/Pegasus: Requested budget

30000 [28000]

Cygnus: Requested disk capacity (TB)

[5]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i043]

Wisteria: Requested budget

200000 [160000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

10000 [8000]

Pegasus: awarded NH product

[10000]

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 : 24

Type : MCRP-S

Electronic and phonon states and superconductivity of multi-band low-carrier systems

Email

y.ono@phys.sc.niigata-u.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

New [CP24I024]

Cygnus/Pegasus: Requested budget

10000 [9000]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

New [wo24i024]

Wisteria: Requested budget

50000 [36000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

5000 [4500]

Primary author(s) : ONO, Yoshiaki (Niigata University); Mr KAWAI, Hiroyuki (Niigata University); Mr IKADA, Riku (Niigata University); Mr WANG, Yu (Niigata University); Mr YONEYAMA, Hiroki (Niigata University); Mr MASUZAWA, Shota (Niigata University)

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

Contribution ID : 25

Type : MCRP-S

Study on numerical library on many-core/GPU clusters

Email

daisuke@cs.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[NUMLIB]

Cygnus/Pegasus: Requested budget

10000 [7200]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i018]

Wisteria: Requested budget

50000 [28000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH product

5000 [3200]

Pegasus: awarded NH product

2500 [2000]

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 : 26

Type : MCRP-M

Code development for high-temperature plasma transport analyses in open and inhomogeneous magnetic field systems

Email

togo@prc.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[FROGAMMA]

Cygnus/Pegasus: Requested budget

10000 [7200]

Cygnus: Requested disk capacity (TB)

[2.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

10000 [7200]

Pegasus: awarded NH product

[0]

Primary author(s) : TOGO, Satoshi (Plasma Research Center, University of Tsukuba)

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

Contribution ID : 27

Type : MCRP-S

Proton-rich nuclei and proton-emitting radioactivity

Email

gz2r2dhh@gmail.com

Number of project members

1

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[wo23i034]

Wisteria: Requested budget

25000 [14000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygnus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

Primary author(s) : Dr OISHI, TOMOHIRO (RIKEN Nishina Center)

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 28

Type : MCRP-S

Massively Parallel and Accurate Detection of Persistent Memory Bugs

Email

arahori@c.titech.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[PEGASUZZ]

Cygnus/Pegasus: Requested budget

[7280]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

[3640]

Primary author(s) : Dr ARAHORI, Yoshitaka (Tokyo Institute of Technology)

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

Contribution ID : 29

Type : MCRP-S

Generating matrix elements of two-body currents

Email

miyagi@theorie.ikp.physik.tu-darmstadt.de

Number of project members

1

Cygnus/Pegasus: Project code

[METBC]

Cygnus/Pegasus: Requested budget

5000 [4000]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

5000 [4000]

Pegasus: awarded NH product

[0]

Primary author(s) : MIYAGI, Takayuki (TU Darmstadt)

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 30

Type : MCRP-S

Extreme Weather (Extreme rainfall); Global Climate Models and Downscaling Techniques; Climate-Hydrology coupling.

Email

s2330211@u.tsukuba.jp

Number of project members

5

Cygnus/Pegasus: Project code

HYDROCLIM [HYDROCLI]

Cygnus/Pegasus: Requested budget

180000 [5120]

Cygnus: Requested disk capacity (TB)

20 [4]

Pegasus: Requested disk capacity (TB)

20 [5]

Wisteria: Project code

New [wo24i030]

Wisteria: Requested budget

178200 [25600]

Wisteria: Requested disk capacity (TB)

30 [4]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

90000 [2560]

Primary author(s) : Mr ENDALEW , NEGUSU TAREKEGN (University of Tsukuba,
Department of Engineering Mechanics and Energy)

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

Contribution ID : 31

Type : MCRP-S

Numerical simulations of clear air turbulence and rapid changes in wind speed and direction due to an isolated mountain using a high-resolution numerical weather prediction model

Email

nishi@nda.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[wo23i008]

Wisteria: Requested budget

50000 [40000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

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

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

Contribution ID : 32

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 budget

3200 [2560]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i009]

Wisteria: Requested budget

19200 [15360]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygnus: awarded NH product

3200 [2560]

Pegasus: awarded NH product

[0]

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 : 33

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

8

Cygnus/Pegasus: Project code

[BRIDGE]

Cygnus/Pegasus: Requested budget

3000 [2520]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i060]

Wisteria: Requested budget

32000 [17920]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH produt

1000 [720]

Pegasus: awarded NH product

1000 [900]

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

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 34

Type : MCRP-S

Radiomics feature extraction from medical images and visualization

Email

meg.riken.mgm@gmail.com

Number of project members

3

Cygnus/Pegasus: Project code

[JUNTENMP]

Cygnus/Pegasus: Requested budget

5000 [2240]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

5000 [2240]

Pegasus: awarded NH product

[0]

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

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

Contribution ID : 35

Type : MCRP-M

Development of deep learning models for automated sleep diagnosis and treatment

Email

horie@cs.tsukuba.ac.jp

Number of project members

10

Cygnus/Pegasus: Project code

[SLEEP]

Cygnus/Pegasus: Requested budget

30000 [32400]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

15000 [16200]

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

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

Contribution ID : 36

Type : MCRP-S

Research on Building Segmentation from High-Resolution Remote Sensing Images Using Deep Learning

Email

s2230298@s.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

Seg2024 [SEG2024]

Cygnus/Pegasus: Requested budget

2000 [1440]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

2000 [1440]

Pegasus: awarded NH product

[0]

Primary author(s) : ZHANG, Haoran (Institute of Life and Environmental Sciences,
University of Tsukuba)

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

Contribution ID : 37

Type : MCRP-S

Grassmann tensor network approach to particle physics and its application to quantum computation

Email

akiyama@ccs.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[GTN]

Cygnus/Pegasus: Requested budget

10000 [9600]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

New [wo24i037]

Wisteria: Requested budget

50000 [40000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH product

2000 [1600]

Pegasus: awarded NH product

[4000]

Primary author(s) : AKIYAMA, Shinichiro (University of Tsukuba)

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 38

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

12

Cygnus/Pegasus: Project code

[PROTEIN]

Cygnus/Pegasus: Requested budget

40000 [32400]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

wo22i035 [No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

15 [0]

Cygnus: awarded NH product

38000 [30400]

Pegasus: awarded NH product

[1000]

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

Track Classification : Life Science(生命分野)

Contribution ID : 39

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

5

Cygnus/Pegasus: Project code

[GRRMHDBH]

Cygnus/Pegasus: Requested budget

[20000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i055]

Wisteria: Requested budget

200000 [160000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

[10000]

Primary author(s) : ASAHINA, Yuta

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 40

Type : MCRP-S

Elbow Structure Recognition From Ultrasound Video Using Deep Learning

Email

akahori.shizuka@image.iit.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

ESR_24 [ESR24]

Cygnus/Pegasus: Requested budget

1800 [1134]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

900 [567]

Primary author(s) : AKAHORI, Shizuka (University of Tsukuba, CCS)

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

Contribution ID : 41

Type : MCRP-M

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 budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[wo22i038]

Wisteria: Requested budget

480000 [144000]

Wisteria: Requested disk capacity (TB)

100 [85]

Cygnus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

Primary author(s) : FUKAYA, Hidenori; HASHIMOTO, Shoji (KEK)

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 42

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

3

Cygnus/Pegasus: Project code

[AMDASTRO]

Cygnus/Pegasus: Requested budget

10000 [9000]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i032]

Wisteria: Requested budget

50000 [40000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH product

5000 [4000]

Pegasus: awarded NH product

2500 [2500]

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

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 43

Type : MCRP-L

First-principles Lattice QCD calculation of Hadron interactions

Email

doi@ribf.riken.jp

Number of project members

10

Cygnus/Pegasus: Project code

[HALQCD]

Cygnus/Pegasus: Requested budget

4700 [3290]

Cygnus: Requested disk capacity (TB)

20 [18]

Pegasus: Requested disk capacity (TB)

[20]

Wisteria: Project code

[wo22i065]

Wisteria: Requested budget

[308400]

Wisteria: Requested disk capacity (TB)

30 [27]

Cygsus: awarded NH produt

4000 [2800]

Pegasus: awarded NH product

350 [245]

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

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 44

Type : MCRP-S

Development of Optimization Algorithm for Order/ Degree and Order/Radix Problems

Email

hanada@kansai-u.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[GA]

Cygnus/Pegasus: Requested budget

10000 [8640]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

New [wo24i044]

Wisteria: Requested budget

50000 [36000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH product

2000 [1440]

Pegasus: awarded NH product

4000 [3600]

Primary author(s) : Ms HANADA, Yoshiko (Kansai University)

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

Contribution ID : 45

Type : MCRP-M

The Computational Study on the Helix Formation inside the Ribosome Tunnel

Email

takunoriyasuda@gmail.com

Number of project members

6

Cygnus/Pegasus: Project code

[BIOSIM]

Cygnus/Pegasus: Requested budget

40000 [38000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

10000 [8000]

Pegasus: awarded NH product

[15000]

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

Track Classification : Biology(生物分野)

Contribution ID : 46

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

13

Cygnus/Pegasus: Project code

[CSPP]

Cygnus/Pegasus: Requested budget

8000 [6400]

Cygnus: Requested disk capacity (TB)

10 [8]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

8000 [6400]

Pegasus: awarded NH product

[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 : 47

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 budget

7000 [4200]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

5000 [2800]

Pegasus: awarded NH product

1000 [700]

Primary author(s) : FUKUSHIMA, Hajime

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 48

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 budget

5000 [3024]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i028]

Wisteria: Requested budget

200000 [100800]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH produt

1000 [504]

Pegasus: awarded NH product

2000 [1260]

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

Track Classification : Numerical analysis(数值解析分野)

Contribution ID : 49

Type : MCRP-M

Elucidating Language Emergence Mechanism by Evolutionary Multi-Agent Reinforcement Learning

Email

kwakaba@slis.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[LE2024]

Cygnus/Pegasus: Requested budget

40000 [32000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

40000 [32000]

Pegasus: awarded NH product

[0]

Primary author(s) : Prof. WAKABAYASHI, Kei (University of Tsukuba)

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

Contribution ID : 50

Type : MCRP-M

Generative AI based planning system of adaptive radiotherapy

Email

sho.ozaki@hirosaki-u.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[DLHNN]

Cygnus/Pegasus: Requested budget

15000 [12000]

Cygnus: Requested disk capacity (TB)

[5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

15000 [12000]

Pegasus: awarded NH product

[0]

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

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

Contribution ID : 51

Type : MCRP-FPGA

Evaluation of Matrix Multiplication in Various Arithmetic Formats

Email

nakasato@u-aizu.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

[HPFP]

Cygnus/Pegasus: Requested budget

5000 [4000]

Cygnus: Requested disk capacity (TB)

10 [8]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

5000 [4000]

Pegasus: awarded NH product

[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 : 52

Type : MCRP-M

Critical point of finite-temperature QCD with heavy quarks

Email

kanaya@ccs.tsukuba.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[WHOTSPOTC]

Cygnus/Pegasus: Requested budget

9000 [5880]

Cygnus: Requested disk capacity (TB)

[5]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

wo22i046 [wo24i052]

Wisteria: Requested budget

200000 [160000]

Wisteria: Requested disk capacity (TB)

10 [8.5]

Cygsus: awarded NH product

3000 [1680]

Pegasus: awarded NH product

3000 [2100]

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

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 53

Type : MCRP-M

Research of Parallel I/O and Storage System

Email

tatebe@cs.tsukuba.ac.jp

Number of project members

16

Cygnus/Pegasus: Project code

[NBB]

Cygnus/Pegasus: Requested budget

40000 [52800]

Cygnus: Requested disk capacity (TB)

20 [17]

Pegasus: Requested disk capacity (TB)

[150]

Wisteria: Project code

wo23g004 [wo24i053]

Wisteria: Requested budget

20000 [17600]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

20000 [26400]

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 : 54

Type : MCRP-M

Formation of massive star clusters by gas collisions in the low-metal environment of the early Universe

Email

maeda.ryunosuke@astr.tohoku.ac.jp

Number of project members

2

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

New [wo24i054]

Wisteria: Requested budget

188340 [150672]

Wisteria: Requested disk capacity (TB)

10 [8.5]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

Primary author(s) : MAEDA, Ryunosuke (Tohoku University)

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 55

Type : MCRP-M

First-principles calculation of electronic and atomic scale dynamics in nanoscale materials

Email

uemoto@eedept.kobe-u.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[NANOMAT]

Cygnus/Pegasus: Requested budget

4000 [2800]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i066]

Wisteria: Requested budget

140000 [112000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

2000 [1400]

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

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

Contribution ID : 56

Type : MCRP-M

First Principles calculations of doping effect to increase the dielectric constant of metal oxides and applied to advanced transistors and capacitors

Email

mrinal.si.gf@u.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[FPIS]

Cygnus/Pegasus: Requested budget

30000 [15680]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

10000 [4480]

Pegasus: awarded NH product

10000 [5600]

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

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

Contribution ID : 57

Type : MCRP-M

Construction of big data for radiative transfer simulations of traumatic brain hemorrhage

Email

yajima@ccs.tsukuba.ac.jp

Number of project members

9

Cygnus/Pegasus: Project code

[RT810]

Cygnus/Pegasus: Requested budget

7000 [4760]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i019]

Wisteria: Requested budget

150000 [108000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

1000 [560]

Pegasus: awarded NH product

3000 [2100]

Primary author(s) : YAJIMA, Hidenobu

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 58

Type : MCRP-S

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

Email

imamura.toshiyuki@riken.jp

Number of project members

5

Cygnus/Pegasus: Project code

[LSPANC]

Cygnus/Pegasus: Requested budget

5000 [3430]

Cygnus: Requested disk capacity (TB)

2.5 [2]

Pegasus: Requested disk capacity (TB)

[2.5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

500 [280]

Pegasus: awarded NH product

2250 [1575]

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

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

Contribution ID : 59

Type : MCRP-L

B meson physics from lattice QCD for search of new physics

Email

takashi.kaneko@kek.jp

Number of project members

4

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[wo22i049]

Wisteria: Requested budget

[478000]

Wisteria: Requested disk capacity (TB)

30 [27]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

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

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 60

Type : MCRP-M

Understanding Primordial Star Formation : Resolving Internal Structure of Protostars

Email

kimurakztk@gmail.com

Number of project members

1

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

New [wo24i060]

Wisteria: Requested budget

120000 [77760]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

Primary author(s) : KIMURA, Kazutaka (Tohoku University)

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 61

Type : MCRP-M

First-principles calculations of metal electrode catalysts for achieving a sustainable society

Email

otani@ccs.tsukuba.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

[EIS00001]

Cygnus/Pegasus: Requested budget

40000 [25200]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i030]

Wisteria: Requested budget

200000 [78400]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH produt

20000 [11200]

Pegasus: awarded NH product

10000 [7000]

Primary author(s) : OTANI, Minoru

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

Contribution ID : 62

Type : MCRP-S

Numerical studies for QED vacuum and high-temperature material physics

Email

shibata-ka@ile.osaka-u.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

New [wo24i062]

Wisteria: Requested budget

50000 [40000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygnus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

Primary author(s) : SHIBATA, Kazunori (ILE, Osaka University)

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

Contribution ID : 63

Type : MCRP-FPGA

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

Email

taisuke@cs.tsukuba.ac.jp

Number of project members

20

Cygnus/Pegasus: Project code

[CCUSC]

Cygnus/Pegasus: Requested budget

10000 [7200]

Cygnus: Requested disk capacity (TB)

10 [8]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

10000 [7200]

Pegasus: awarded NH product

[0]

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

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

Contribution ID : 64

Type : MCRP-M

Investigation on the structure-function relationship of miss-translated proteins

Email

morita@ccs.tsukuba.ac.jp

Number of project members

7

Cygnus/Pegasus: Project code

[MOLBIO]

Cygnus/Pegasus: Requested budget

[40000]

Cygnus: Requested disk capacity (TB)

15 [8.5]

Pegasus: Requested disk capacity (TB)

[15]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

[20000]

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

Track Classification : Life Science(生命分野)

Contribution ID : 65

Type : MCRP-M

Light Field Generation Methods Using Multiple Omnidirectional Cameras

Email

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

Number of project members

1

Cygnus/Pegasus: Project code

[MAGI]

Cygnus/Pegasus: Requested budget

8000 [4536]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

4000 [2268]

Primary author(s) : LI, Qiaoge (School of Integrative and Global Majors, Ph.D. Program in Empowerment Informatics, University of Tsukuba)

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

Contribution ID : 66

Type : MCRP-S

Nuclear structure calculation using reduced order modeling

Email

hinohara@nucl.ph.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[GCM]

Cygnus/Pegasus: Requested budget

1000 [560]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i024]

Wisteria: Requested budget

50000 [28000]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH produt

1000 [560]

Pegasus: awarded NH product

[0]

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

Track Classification : Nuclear Physics(原子核分野)

Contribution ID : 67

Type : MCRP-M

Microscopic analysis on light-induced nonequilibrium electron dynamics

Email

ssato@ccs.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[ATTOQD]

Cygnus/Pegasus: Requested budget

1000 [504]

Cygnus: Requested disk capacity (TB)

[5]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i026]

Wisteria: Requested budget

189260 [136267.2]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

1000 [504]

Pegasus: awarded NH product

[0]

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

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

Contribution ID : 68

Type : MCRP-M

Galaxy Formation in the Early Universe

Email

kohji@ccs.tsukuba.ac.jp

Number of project members

21

Cygnus/Pegasus: Project code

[RTRHD]

Cygnus/Pegasus: Requested budget

22000 [15360]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i006]

Wisteria: Requested budget

123000 [98400]

Wisteria: Requested disk capacity (TB)

40 [34]

Cygnus: awarded NH product

14000 [8960]

Pegasus: awarded NH product

4000 [3200]

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

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 69

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

3

Cygnus/Pegasus: Project code

[TDDFT]

Cygnus/Pegasus: Requested budget

750 [490]

Cygnus: Requested disk capacity (TB)

[5]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i063]

Wisteria: Requested budget

200000 [160000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

250 [140]

Pegasus: awarded NH product

250 [175]

Primary author(s) : YABANA, Kazuhiro

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

Contribution ID : 70

Type : MCRP-M

Regional climate modeling using numerical simulations and artificial intelligence

Email

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

Number of project members

20

Cygnus/Pegasus: Project code

[REGCLIM]

Cygnus/Pegasus: Requested budget

40000 [26600]

Cygnus: Requested disk capacity (TB)

20 [17]

Pegasus: Requested disk capacity (TB)

[50]

Wisteria: Project code

[wo22i039]

Wisteria: Requested budget

150000 [120000]

Wisteria: Requested disk capacity (TB)

250 [212.5]

Cygsus: awarded NH produt

10000 [5600]

Pegasus: awarded NH product

15000 [10500]

Primary author(s) : DOAN, Quang Van (University of Tsukuba)

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

Contribution ID : 71

Type : MCRP-M

N-body simulations of MW galaxy encountering with a dwarf galaxy

Email

rkodama@g.ecc.u-tokyo.ac.jp

Number of project members

2

Cygnus/Pegasus: Project code

[MWDWARFS]

Cygnus/Pegasus: Requested budget

20000 [18000]

Cygnus: Requested disk capacity (TB)

20 [17]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

10000 [8000]

Pegasus: awarded NH product

[5000]

Primary author(s) : Ms KODAMA, Rumi (University of Tokyo)

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 72

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 budget

38000 [29160]

Cygnus: Requested disk capacity (TB)

150 [127.5]

Pegasus: Requested disk capacity (TB)

[150]

Wisteria: Project code

[wo22i023]

Wisteria: Requested budget

200000 [144000]

Wisteria: Requested disk capacity (TB)

150 [127.5]

Cygnus: awarded NH product

28000 [20160]

Pegasus: awarded NH product

5000 [4500]

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

Track Classification : Astrophysics(宇宙分野)

Contribution ID : 73

Type : MCRP-M

Molecular Simulation Study for An Enzyme design

Email

jgmwtmg@gmail.com

Number of project members

1

Cygnus/Pegasus: Project code

[GLYCO]

Cygnus/Pegasus: Requested budget

40000 [32400]

Cygnus: Requested disk capacity (TB)

[5]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

New [wo24i073]

Wisteria: Requested budget

200000 [100800]

Wisteria: Requested disk capacity (TB)

5 [4.25]

Cygnus: awarded NH product

20000 [14400]

Pegasus: awarded NH product

10000 [9000]

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

Track Classification : Life Science(生命分野)

Contribution ID : 74

Type : MCRP-S

Development of quantum chemistry tools to elucidate biological chemical reactions

Email

mshoji@ccs.tsukuba.ac.jp

Number of project members

6

Cygnus/Pegasus: Project code

[CCSPHYSB]

Cygnus/Pegasus: Requested budget

10000 [7776]

Cygnus: Requested disk capacity (TB)

10 [8]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

2000 [1296]

Pegasus: awarded NH product

4000 [3240]

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

Track Classification : Life Science(生命分野)

Contribution ID : 75

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 budget

40000 [36000]

Cygnus: Requested disk capacity (TB)

60 [51]

Pegasus: Requested disk capacity (TB)

[30]

Wisteria: Project code

[wo22i021]

Wisteria: Requested budget

150000 [108000]

Wisteria: Requested disk capacity (TB)

80 [68]

Cygnus: awarded NH product

20000 [14400]

Pegasus: awarded NH product

10000 [10800]

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

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 76

Type : MCRP-S

Asynchronous Precision Adjustment for Approximate Computing on HPC Systems

Email

yasutaka.wada@meisei-u.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

New [APAAC]

Cygnus/Pegasus: Requested budget

10000 [6048]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

New (undecided)

Wisteria: Requested budget

50000 [25200]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH produt

2000 [1008]

Pegasus: awarded NH product

4000 [2520]

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 : 77

Type : MCRP-S

Joint Reconstruction and Registration of Bones from X-Ray Images

Email

shrestha.pragyan@image.iit.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

[JRR23]

Cygnus/Pegasus: Requested budget

3200 [2240]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

1600 [1120]

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

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

Contribution ID : 78

Type : MCRP-M

Novel View Synthesis for Medical X-Ray Images using Progressive Conditional Diffusion Models

Email

xiechun@ccs.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

XrayDiff [XRAYDIFF]

Cygnus/Pegasus: Requested budget

40000 [36000]

Cygnus: Requested disk capacity (TB)

[5]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

20000 [16000]

Pegasus: awarded NH product

[10000]

Primary author(s) : XIE, Chun (University of Tsukuba)

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

Contribution ID : 79

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 budget

10000 [6440]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo22i040]

Wisteria: Requested budget

20000 [11200]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH product

4000 [2240]

Pegasus: awarded NH product

3000 [2100]

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

Track Classification : Numerical analysis(数值解析分野)

Contribution ID : 80

Type : MCRP-S

Development of Programming Environment for High-performance Systems using Various Accelerators

Email

fujita@ccs.tsukuba.ac.jp

Number of project members

3

Cygnus/Pegasus: Project code

[CHRMSYCL]

Cygnus/Pegasus: Requested budget

10000 [8100]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

New [wo24i080]

Wisteria: Requested budget

5000 [3600]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH produt

5000 [3600]

Pegasus: awarded NH product

2500 [2250]

Primary author(s) : FUJITA, Norihisa

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

Contribution ID : 81

Type : MCRP-M

Acceleration of RSPACE by GPU and investigation of electronic structures of device interfaces

Email

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

Number of project members

12

Cygnus/Pegasus: Project code

[RSPACE]

Cygnus/Pegasus: Requested budget

34000 [22194]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i057]

Wisteria: Requested budget

200000 [144000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

33000 [21384]

Pegasus: awarded NH product

500 [405]

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

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

Contribution ID : 82

Type : MCRP-M

Lattice Study on color confinement and the mass gap based on the gauge-covariant decomposition

Email

akihiro.shibata@kek.jp

Number of project members

4

Cygnus/Pegasus: Project code

[QCONFINE]

Cygnus/Pegasus: Requested budget

40000 [25920]

Cygnus: Requested disk capacity (TB)

25 [21.25]

Pegasus: Requested disk capacity (TB)

[25]

Wisteria: Project code

[wo22i071]

Wisteria: Requested budget

200000 [115200]

Wisteria: Requested disk capacity (TB)

25 [21.25]

Cygsus: awarded NH produt

20000 [11520]

Pegasus: awarded NH product

10000 [7200]

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

Track Classification : Particle Physics(素粒子分野)

Contribution ID : 83

Type : MCRP-M

Computer Graphics Research based on Large-Scale Learning of Elemental Decomposition

Email

kanamori@cs.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[CGG]

Cygnus/Pegasus: Requested budget

40000 [36000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[30] [update 90]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

[0]

Pegasus: awarded NH product

20000 [18000]

Primary author(s) : KANAMORI, Yoshihiro (University of Tsukuba)

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

Contribution ID : 84

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

10

Cygnus/Pegasus: Project code

[CMSLAB]

Cygnus/Pegasus: Requested budget

10000 [5670]

Cygnus: Requested disk capacity (TB)

5 [4]

Pegasus: Requested disk capacity (TB)

[5]

Wisteria: Project code

[wo23i064]

Wisteria: Requested budget

50000 [28800]

Wisteria: Requested disk capacity (TB)

5 [4]

Cygsus: awarded NH product

5000 [2520]

Pegasus: awarded NH product

2500 [1575]

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

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

Contribution ID : 85

Type : MCRP-M

Novel measurement data analysis by massively parallel data-driven science

Email

hoshi.takeo@nifs.ac.jp

Number of project members

5

Cygnus/Pegasus: Project code

[No]

Cygnus/Pegasus: Requested budget

[0]

Cygnus: Requested disk capacity (TB)

[0]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[wo22i069]

Wisteria: Requested budget

200000 [144000]

Wisteria: Requested disk capacity (TB)

10 [8.5]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

[0]

Primary author(s) : HOSHI, Takeo (National Institute of Fusion Science); Mr NAKANO, AKito (Tottori University); Mr TERACHI, Yuma (Tottori University); Mr TANIDA, Syuuya (Tottori University); Mr SUDA, Masanari (Tottori University)

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

Contribution ID : 86

Type : MCRP-M

Numerical study on novel Kitaev materials for quantum spin liquid states with exotic fractional excitations

Email

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

Number of project members

1

Cygnus/Pegasus: Project code

[FRGQSL]

Cygnus/Pegasus: Requested budget

40000 [26600]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

[wo22i072]

Wisteria: Requested budget

200000 [128000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygnus: awarded NH product

10000 [5600]

Pegasus: awarded NH product

15000 [10500]

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

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

Contribution ID : 87

Type : MCRP-FPGA

Exploring Acceleration Opportunities for Large-Scale Sparse Matrix Computations via Direct Ultra-Precision Arithmetic Execution

Email

yoshiki@cs.tsukuba.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

[UHPFPGA]

Cygnus/Pegasus: Requested budget

5000 [4000]

Cygnus: Requested disk capacity (TB)

[5]

Pegasus: Requested disk capacity (TB)

[0]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygnus: awarded NH product

5000 [4000]

Pegasus: awarded NH product

[0]

Primary author(s) : YAMAGUCHI, Yoshiki

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

Contribution ID : 88

Type : MCRP-M

First-principles study of interfaces and grain boundaries in alloys

Email

uemura.naoki@kuas.ac.jp

Number of project members

4

Cygnus/Pegasus: Project code

New [KUASM6LB]

Cygnus/Pegasus: Requested budget

40000 [36000]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[10]

Wisteria: Project code

New [wo24i088]

Wisteria: Requested budget

200000 [144000]

Wisteria: Requested disk capacity (TB)

15 [12.75]

Cygsus: awarded NH product

[0]

Pegasus: awarded NH product

20000 [18000]

Primary author(s) : Dr UEMURA, Naoki (Kyoto University of Advanced Science)

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

Contribution ID : 89

Type : MCRP-M

Video Retrieval Based on Similarity of Movement Trajectories in Team Sports

Email

uchida.ikuma@image.iit.tsukuba.ac.jp

Number of project members

1

Cygnus/Pegasus: Project code

New (undecided)

Cygnus/Pegasus: Requested budget

2880 [1976.4]

Cygnus: Requested disk capacity (TB)

10 [8.5]

Pegasus: Requested disk capacity (TB)

[4]

Wisteria: Project code

[No]

Wisteria: Requested budget

[0]

Wisteria: Requested disk capacity (TB)

[0]

Cygsus: awarded NH produt

[0]

Pegasus: awarded NH product

1220 [988.2]

Primary author(s) : UCHIDA, Ikuma (University of Tsukuba)

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