# XC30 Application Form

This is the application form for XC-A, XC-B, XC-MD, and XC-Trial categories of XC30 system. In order to apply for XC-S category, please download and fill in the other application form "xc30\_app\_Ex\_large.\*\*\*". You may erase sentences except for the section titles if you need more space to describe your plans.

### 1 Significance and purpose of you research

Describe the significance and purpose of your research plan in detail. Clarify the background of the research, the scientific goal, and the originality of your approach. (Do not exceed 1 page.)

## 2 Research plan

Describe your research plan and numerical methods and clarify results you expect until the next March. If you adopt a somewhat unique method, you may emphasize that in this section. (Do not exceed 1 page.)

### 3 Status and requirement for numerical code

(This section, including §3.1 and 3.2, does not exceed 1 page)

# 3.1 Status of the development and optimization of numerical code (you do not need to fill in the following blank in case of XC-Trial category)

Describe the current status of the development and optimization of your numerical code. If you are a former user of computers at CfCA, you need to clarify that the numerical code is expected to run efficiently on this system by showing the scalability of the code.

Especially, if you apply for XC-A category, you need to show the scalability at least up to 1024 cores.

### 3.2 Required computational resources

Describe the expectation for computational resources (number of nodes and CPU cores, memory requirement, computational time for a single run, the total computational time, and so on) for your calculations.

### 4 Results of earlier works related to your research

(You have to fill in this section, if you apply for XC-S or XC-A categories.)

If you are a former user of computers at CfCA for the past three years, complete the following table. You can only refer publications related to works achieved by using CfCA computers. You may note details of the achievement in the following blank("Note"). (This section, including the reference list, does not exceed 1 page)

#### An example of 2015

Year	Category	Publications
2012 1st half		
2012 2nd half	XT4B, SX9B	
2013 1st half	XC-B	
2013 2nd half	XC-A	[3]
2014 1st half	XC-A	[3]
2014 2nd half	XC-A, XC-S	[2, 3]

2014 1st half is April 2014-September 2014.

2014 2nd half is October 2014-March 2015.

Please write the past category and the related reference from 2012 2nd half to 2015 1st half for the application in August.

Note

### 5 Reference

- [1] An example reference list. Clarify if the paper is refereed or unrefereed.
- [2] Suzuki, A., & Shigeyama, T. 2013, ApJL, 764, L12 (SX9B, refereed)
- [3] Takiwaki, T., Kotake, K. & Suwa, Y. 2013, ApJ, 786 83 (XT4B, XC-B, XC-A, refereed)