

Osaka Central Advanced Mathematical Institute, Osaka Metropolitan University Application Guidelines for Joint Usage/Research project in FY2022

Since April 2019, Osaka City University Advanced Mathematical Institute has been authorized as a MEXT Center for Joint Usage/Research.

Name of Center: “Joint Usage/Research Center on Mathematics and Theoretical Physics”

**Research fields: Mathematics (algebra, geometry, and analysis) and Theoretical physics
(mathematical physics and astrophysics)**

In April 2022, Osaka City University and Osaka Prefecture University will merge to establish Osaka Metropolitan University (OMU). Accordingly, our institute will change its name to Osaka Central Advanced Mathematical Institute. However, we are pleased to announce the call for proposal of research projects in the 2022 fiscal year as a continuation of the Joint Usage/Research project. The overview and guidelines for application are as follows.

1. Purpose and Overview

Since the 21st Century COE Program, Osaka Central Advanced Mathematical Institute (OCAMI) will have maintained joint research and research exchange with domestic and foreign universities, and built international and domestic networks. Based on past achievements, OCAMI will further develop its activities to a new stage. We provide new international research and education by collaboration and co-creation of mathematics and theoretical physics; exchange talented researchers through the international and domestic networks; and build a world-leading research and education center in the fields of mathematics and theoretical physics with the aim of further strengthening and developing the foundation of academic research, creating new research, and fostering young international researchers. From fiscal 2022 in the new university, OMU, there will be a new structure for collaboration and co-creation among researchers in mathematics and mathematical sciences from Osaka City University and those from Osaka Prefecture University. In addition to the Mathematics Division and the Theoretical Physics Division, we are going to establish the Division of Mathematics and Mathematical Sciences, and the Applied Mathematics Research Group. We will take a cross-sectional approach to these research groups and promote the creation of new mathematics that integrates with various fields of mathematical sciences.

2. Call for proposals of joint usage/research projects

The present call for proposals consists of three categories in the following table, and is aimed at joint usage/research corresponding to the above research fields and applied mathematics. In principle, the joint usage/research projects should be carried out within the 2022 fiscal year (from April 2022 to March 2023).

(1)	Joint Usage/Research (general)	Joint Usage/Research (A)	Planned number of participants : greater than or equal to 50
		Joint Usage/Research (B)	Planned number of participants : within 50
		Joint Usage/Research (C)	Planned number of participants : within 10
(2)	International Joint Work “Mathematical Science of Symmetry, Topology and Moduli”		
(3)	Large Scale International Conference		

(1) Joint Usage/Research (general)

Joint Usage/Research (A):

Planned number of participants: greater than or equal to 50

Joint Usage/Research (B):

Planned number of participants: within 50

Joint Usage/Research (C):

Planned number of participants: within 10

Terms: In principle, the joint usage/research should be carried out at Osaka Metropolitan University (Sugimoto campus, Nakamozu campus, Umeda Satellite campus, I-site Namba, etc.). Online or hybrid sessions based at Osaka Metropolitan University are also allowed. If you wish to conduct the joint usage/research at other locations in Japan, you need the approval of the Chair of the Center Committee.

(2) International Joint Work “Mathematical Science of Symmetry, Topology and Moduli”

Terms: Joint research to be conducted at OCAMI, at the overseas university research institutions having concluded a research cooperation agreement with OCAMI, or at the international partner institutes in the Brain Circulation Program promoted by OCAMI (please see the “list of international partner institutes”). Proposals that are expected to produce research results through conducting joint research there, inviting researchers from the partner institutions, and dispatching your researchers to the organizations in the medium and long term. Proposals aiming for new expansion of overseas partner institutions are also welcome.

* Propose a research plan that takes into account the impact of the COVID-19 pandemic.

(3) Large Scale International Conference

Terms: Project should promote collaboration/co-creation of mathematics and theoretical physics. In principle, the joint usage/research should be conducted at Osaka Metropolitan University (Sugimoto campus, Nakamozu campus, Umeda Satellite campus, I-site Namba, etc.). Online or hybrid sessions based at Osaka Metropolitan University are also allowed. If you wish to conduct the joint usage/research at other locations in Japan, you need the approval of the Chair of the Center Committee.

3. Application method

Documents to be submitted:

- (1) Proposal for Joint usage/research (designated format in Excel or Word)
- (2) References (free format: implementation program, related papers, etc.)

For applications submitted by e-mail:

Send to sci-ocamikyoten@list.osaka-cu.ac.jp

*Please write “application for 2022 OCAMI research proposal” in the subject line.

For applications submitted by mail:

*Please write “application for 2022 OCAMI research proposal” in red on the cover of envelope.

Sending Address

Ms. Yuko Yagi (secretary of Center for Joint Usage/Research)
Osaka City University Advanced Mathematical Institute,
3-3-138 Sugimoto, Sumiyoshi-ku, Osaka 558-8585, Japan,

4. Application deadline

Application must be received by 14 March, 2022 (Mon) 12:00 (JST).

(If you need to delay due to unavoidable circumstances, please contact us.)

5. Selection process

Research projects will be selected by the Project Selection Committee, and be certified by the deliberations of the Center Committee.

Selection criteria:

- (1) Feasibility.
- (2) International level research can be expected.
- (3) Supporting development of young researchers.
- (4) Participation of female researchers in the project.
- (5) Promoting collaboration/co-creation of mathematics and theoretical physics.

6. Adaption or rejection

The proposer will be informed of the result by mid-April 2022. The amount of financial support may not always be what is requested.

7. Procedure after adoption

- (1) After the adoption, the secretary of the Center will inform you of the process on the submission of implementation planning worksheet, etc.
- (2) After finishing joint usage/research, submit the report on the joint usage/research to the secretary of the Center.

- (3) Report the information on research results (preprints, papers, books, etc.) to the secretary of the Center.

8. Others

- (1) Before submitting a proposal, the proposer should establish contact with the OMU researchers in the proposal. If not, the application will be rejected in principle.
- (2) The information on the adopted research projects, such as project names, abstracts, research plans, and research results will be disclosed on the homepage of the Center.
- (3) It is recommended to submit preprints, which are research results of the project, to the OCAMI Preprint Series. OCAMI Preprint Series is registered to our university's institutional repository. We can give a DOI to the preprint if the authors wish. Note that the authors cannot publish the paper in other places once a DOI is assigned. If the content submitted to the OCAMI Preprint Series is published in other places, please report the information on the publication to the secretary of the Center as soon as possible.
- (4) It is recommended to publish a collection of abstracts of presentations in OCAMI Reports. It will be registered in our university's institutional repository and can be assigned a DOI. Please specify in the proposal whether you wish to prepare and publish the report or not in the item "13. Reports" of the Proposal.
- (5) By approval of the Center Committee, the proposer can hold a jointly hosted conference with another research institute/group.
- (6) In view of the situation of the COVID-19 pandemic, this Center is currently working to develop the equipment and supporting systems required for online streaming. It is recommended that research meetings and seminars to be held as the joint usage/research be held in a hybrid format combining on-site and online delivery.
- (7) The official YouTube channel of OCAMI, "OCAMI_math", has been established. As part of the dissemination of research results, we encourage you to upload videos of your research activities to "OCAMI_math". In particular, uploading introductory lectures for graduate students and overview lectures for non-specialists is recommended because it serves our purpose of fostering young researchers and creating cross-disciplinary mathematics. If you are interested in submitting a video, please contact an OMU researcher.
URL of OCAMI_math channel home:

https://www.youtube.com/channel/UCwLFFDLAzpevNUmGP3bu8_w/featured

9. Contact

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