

### **Framework and Significance of International Joint Research (no more than 5 pages)**

Please describe the framework and significance of the international joint research incorporating the following points. You may switch the order of items and/or the order of descriptions in each item if necessary.

- The level of advancement and future potential of the proposed research domain or field.
- Prospects of the project having a global impact and making a scientific contribution to the research domain or field.
- Necessity and importance for the project to have large-scale and long-term support.
- Concrete description of the participating researchers and their roles within the whole group, made up of the Japan-side research team comprising the applicants and postdocs and/or doctoral students, and the overseas research team.
- The applicants' achievements and/or experience in international collaboration.
- The superiority of the group of applicants, in particular the research capacity of the international joint researcher(s), and the significance of doing the proposed research via international collaboration.
- The state of preparation toward implementing the international joint research plan.

(\JSPSInstructions をコメントアウトしてください。)

## Notes to observe when preparing the Research Proposal Document

\*Delete this entire text box when completing this form.

1. *Read the “Procedures for Preparing and Entering a Research Proposal Document” when preparing this form.*
2. *This form is to be written in English.*
3. *Complete the form using font size 10-point or larger.*
4. *The title and instructions on the upper part of each page should be left intact.*
5. *This form is to be written in no more than 14 pages.*
6. *Please bear in mind that this form is to be read by overseas reviewers as well as Japanese reviewers.*

Elephant eggs have been searched for for many years, but no single sign of it has been found yet. Because this is a world-wide problem, we need an international collaboration to execute a worldwide egg hunt campaign.

Once we find an elephant egg, we will compare its shape with the perfect egg shape derived by Archimedes (*Ἀρχιμήδης*) in a cylindrical coordinate expression:

$$r(z) = 0.5\sqrt{1 - (e^z - 2)^2} . \quad (1)$$

If they do not match, the egg could be a fake. Framing a discovered egg in the shape described by eq. (1) is the “framework” of this research.

[illegible]







### Research Plan (no more than 5 pages)

Please describe the contents of the research plan incorporating the following points. You may switch the order of items and/or the order of descriptions in each item if necessary.

- Background of the proposed research including the circumstances leading to this research proposal, global research trends related to the proposed research, and the positioning of the research within the relevant domain or field.
- Research objectives and methodologies.
- "Key research questions or issues" at the core of the research plan, and the originality and creativity of the research.
- Details of the applicants' ability to conduct the research, the research environment, and the state of preparation toward implementing the research project.

In the first year, we will visit major zoos in the world. We will search for the eggs in Africa in the second year, and in India in the third year.

In one town in Japan, there is a historical custom to worship elephant eggs. At the end of every year, people decorate an elephant egg objet as shown in Fig. 1 and Fig. 2. Cross your eyes to view the figures in 3D. (Lining up figures like this is easier than using `wrapfigure`.) Just as woods are the best places to hide trees, this objet might be used to hide an elephant egg. We will first check this objet to make sure that this is not actually a real elephant egg.



Figure 1: Stare at this with your right eye.



Figure 2: Stare at this with your left eye.

[illegible]



[illegible]





### **Plan for Fostering Early-career Researchers (no more than 4 pages)**

Please concretely and clearly describe the plan for fostering early-career researchers incorporating the following points.

- A concrete plan for fostering early-career researchers, including dispatch of those researchers to overseas research institutions and international exchange (names of overseas research institutions, significance and necessity of dispatch to these institutions, dispatch period, future prospects after returning, etc.). List the names of the participating postdocs and doctoral students of the Japan-side team, up to about the second fiscal year of the project if they have already been specified. The status of coordination of the plan with overseas counterpart teams should also be clarified.
- The roles and positions of early-career researchers in conducting the research project, and details of measures to be taken to support their self-reliance.
- Other unique ideas and initiatives.

Elephants incubate their eggs to raise their offspring. So should we. Any questions?

[illegible]

