



Department of Energy
Washington, DC 20585

July 1, 2024

Dear Dr. Gessner,

I am pleased to inform you that your application to the U.S.-Japan Science and Technology Cooperation Program in High Energy Physics [LAB 24-3200] within the U.S. Department of Energy (DOE) Office of High Energy Physics (HEP) has been reviewed and is being recommended for funding.

Further, due to the competitive nature of the merit-review process, the availability of funds, and programmatic factors and priorities, HEP will not be able to fund the application (or parts therein) at its full requested amount. Nonetheless, we are considering recommending your proposal for funding for 24 months as listed below for the project period **July 1, 2024 – June 30, 2026**. Please note that this is only a recommendation for funding; final decisions are based on concurrences within the different offices in the Office of Science, including the Office of HEP, and are subject to the availability of appropriated funds.

A summary of the discussion from the US-Japan joint panel review process is included with this notification, however, the full reviewers' evaluations will be sent in a separate email, once final funding recommendations have been fully processed for concurrences at DOE

Recommendations on the U.S.-side scope and funding are given below. Your Japanese co-PIs will be informed separately of their funding guidance, and work plans should be coordinated with them as necessary and appropriate. **In order to expedite completion of your funding action, please read and follow all the instructions carefully.** Please contact the individual DOE Program Managers for Advanced Technology R&D or Experimental HEP Research (as appropriate) with any specific questions particularly related to those sub-programs.

I. Budget Priorities and Guidance

For all personnel for whom support is requested, the revised budget must include the proposed effort of that person in person-months, the person's institutional base salary, the requested cost for fringe benefits, and the total requested cost for each person. The requested salary cost must be the product of the proposed effort and the institutional base salary (e.g., for an employee with a 12-month salary basis, a person recommended for up to 1.2 person-months of effort and having an institutional base salary of \$85,000 should list salary support of up to \$8,500). Any proposed voluntary effort commitments should be described in the budget justification, but not on the actual budget form since said contributions are not mandatory, and therefore, will not be formally recognized by DOE.

II. Recommendations

PLEASE NOTE: Funding for FY24 Recommendations will be dispersed at the start of the FY25 fiscal year, in October 2024. FWP's should be for FY25.

Funding Recommendation – US-Japan Collaborative Research Program:

Total Funding: Based on the external peer reviews, a total funding of \$200,000 will be recommended for Proposal: #279418 for the project period of **July 1, 2024 – June 30, 2026.**

\$70,000 will go to SLAC National Laboratory with the following prioritized recommendations:

Budget Period FY 2024:

\$20,000 is provided to support **R&D Advanced Positron Source Concepts** for 12-months beginning July 1, 2024 and ending June 30, 2025. DOE *recommends* priority funding be provided in the following order:

- Travel and any related-COLA;
- M&S and computing support;
- Support for Admin and/or other Professional Staff.

Budget Period FY 2025:

\$50,000 is provided to support **R&D Advanced Positron Source Concepts** for 12-months beginning July 1, 2024 and ending June 30, 2025. DOE *recommends* priority funding be provided in the following order:

- Travel and any related-COLA;
- M&S and computing support;
- Support for Admin and/or other Professional Staff.

\$130,000 will go to Thomas Jefferson National Laboratory with the following prioritized recommendations:

Budget Period FY 2024:

\$60,000 is provided to support **R&D Advanced Positron Source Concepts** for 12-months beginning July 1, 2024 and ending June 30, 2025. DOE *recommends* priority funding be provided in the following order:

- Travel and any related-COLA;
- M&S and computing support;
- Support for Admin and/or other Professional Staff.

Budget Period FY 2025:

\$70,000 is provided to support **R&D Advanced Positron Source Concepts** for 12-months beginning July 1, 2024 and ending June 30, 2025. DOE *recommends* priority funding be provided in the following order:

- Travel and any related-COLA;
- M&S and computing support;
- Support for Admin and/or other Professional Staff.

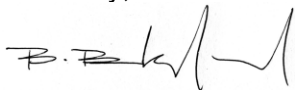
III. Revised Budgets and Field Work Proposals

You and your institution's Budget Office will need to submit a revised budget following the guidance above as part of a new Field Work Proposal (FWP) that will provide the funding vehicle for this activity. **No funding can be provided without an FWP. Note that the revised budget and FWP must be submitted to DOE by a Business Officer/Administrative Officer at your institution. When submitting your Field Work Proposal (FWP), please use this Budget and Reporting (B&R) Code: KA2501032.** Items to focus on include:

- A brief description of the work to be performed, incorporating any specific guidance on scope of work noted above (this can be adapted from the PAMS proposal abstract);
- Include US-Japan at the start of the FWP title;
- Use consistent FWP title for efforts shared by more than one lab;
- the overall bottom line;
- ensure the totals add up correctly *without round-off*;
- please provide sufficient explanation of all personnel (e.g., number of FTE-months paid on this award), and itemize estimated trips – domestic and/or foreign, equipment, materials and supplies (M&S), fringe, etc.;
- Remember to itemize equipment, if any;
- **If any of the work is to be done via sub-contracts to other DOE labs or universities, provide a brief description of the work to be done by each partner, and the estimated costs for each subcontract.**
- **If work is not being done via a sub-contract to a university, each CoPi must submit a FWP for funds to be dispersed to their respective laboratory.**

Once your FWP has been submitted it will be reviewed by the HEP office for accuracy and conformation with the funding guidance above. Depending on the availability of appropriated funds, HEP program managers may contact you and/or your Budget Office about further adjustments to the revised budget for this activity.

Sincerely,



Dr. Brian Beckford
Program Manager
U.S. Department of Energy

Comments from the Joint Review Panel

Advanced Positron Source Concepts

Y. Enomoto (KEK), S. Gessner (SLAC)

Japanese side comments:

This is a proposal to develop a robust and high-power positron source which is essential for future colliders and many physics experiments. The collaboration between the US and Japan has been properly carried-out for the development of the water-cooled rotating target or high-power target design. The development for the capture technology is also carried out with the same framework.

The RPC looks forward to a fruitful outcome of the cooperative activities and recommends this proposal for three years award.

U.S. side comments:

The proposed scope of work would advance the technological development of an electron driven positron source for the ILC. The proposal includes several areas of development that are not particularly closely connected. The technologies that collaborators want to investigate are directly relevant to the HEP community.

The proposal could be significantly strengthened by a stronger collaboration between the partner institutions. Although the proposal is compelling it at times seems disorganized. The large budget request and apparent imbalance between US and Japanese collaborators presents a striking concern.

Due to budgetary constraints the US panel does not recommend this proposal for an award.

Joint Panel conclusion:

After discussion, the Joint Panel recommended this proposal for a two-year award