



Call for Proposals in a Joint NSF-BSF Program in Physics

The U.S.-Israel Binational Science Foundation (BSF) is accepting applications in a joint funding program in Physics in the Directorate for Mathematical & Physical Sciences of the U.S. National Science Foundation (NSF).

General:

1. This NSF-BSF program is not a “special” program with the NSF setting aside money for potential grants. Rather, it is an integral part of the regular NSF core programs in these discipline, with no “special” funds. Clear understanding of it by the U.S. partner is essential before embarking on proposal writing.

Synopsis of Program:

2. The program supports physics research across a broad range of physics disciplines that span scales of space and time from the largest to the smallest and the oldest to the youngest. The joint program is comprised of disciplinary programs covering experimental and theoretical research in the following major subfields of physics: **Accelerator Science; Atomic, Molecular and Optical Physics; Computational Physics; Elementary Particle Physics; Gravitational Physics; Integrative Activities in Physics; Particle Astrophysics; Physics of Living Systems;; and Quantum Information Science.**

Please follow the link for a full description of the program:

https://www.nsf.gov/pubs/2018/nsf18564/nsf18564.htm?WT.mc_id=USNSF_25&WT.mc_ev=click

Basic Plasma Science and Engineering is supported under a separate solicitation. For the full program description follow the link:

https://www.nsf.gov/pubs/2019/nsf19596/nsf19596.htm?WT.mc_id=USNSF_25&WT.mc_ev=click



3. Excluded Areas

Solid State Physics – At the NSF, this area of physics is handled by the Materials Division, which also has a joint funding program with the BSF

Physics Education – BSF does not support research in science education

4. Applications must be written jointly by an Israeli and a U.S. scientist from a U.S. research institution.
5. The NSF accepts applications only from U.S. scientists. Submission to the NSF should be made by the U.S. PI alone, but he has to note in the cover page that it is an “NSF-BSF Application” (the Israeli does not appear as a formal co-PI on the application). In the U.S.-Israeli applications, the role of the Israeli partner(s) must be described. **Furthermore, it should be clearly explained why the contribution of the Israeli PI to the research project is important/essential.**
6. If awarded a grant, the Israeli scientist will receive a grant from the BSF, while the U.S. scientist will receive a grant from the NSF.
7. The size of the BSF grant to the Israeli is expected to be up to \$80,000/year for experimental programs and up to \$55,000/year for theoretical or computer based research, **subject to the availability of funds.** If more than a single Israeli group is involved in the research, the budget may be increased by up to 50%.
8. BSF will follow the decision by the U.S. funding agency regarding the length of the project.
9. The program is expected to be held annually.
10. We have put together a presentation with tips for Israeli scientists who wish to submit to the NSF-BSF. You can download the presentation [here](#)

Eligibility:

1. All inquiries regarding the eligibility of the research topic must be made by the U.S. PIs to the program directors at NSF. BSF will not respond to any query regarding topic eligibility.



2. All regulations regarding eligibility of the BSF (for the Israeli PI) or the NSF (for the U.S. PI) will apply to this program.
3. **Each Israeli scientist is allowed to submit up to two applications/year, if at least one of them is to any of the NSF-BSF programs that have no deadline.**
4. Israelis with active grants are allowed to submit an additional application to any of the **NSF-BSF programs with no deadline** (they don't have to wait for the last year of their grant before submitting).
5. It is allowed to submit both to an NSF-BSF program and the regular BSF program, including similar applications. In the event that both applications are awarded grants, they will be funded, unless the research applications are mostly similar, in which case only the NSF-BSF program will be funded.
6. In case of similar NSF-BSF and regular BSF applications, in which the NSF evaluation was not completed by the time the regular BSF awards are made, the BSF will defer its decision regarding a possible grant to this application, until the NSF-BSF awards are announced.

Evaluation:

1. Proposals will be evaluated by the NSF, using its criteria. The BSF will create a small screening panel to quickly examine the role of the Israelis in the applications, and ascertain that it is meaningful, and that they have the knowhow and facilities to perform their part in the research. This panel will also advise the BSF regarding the budget requests, but will not evaluate the scientific merit of the applications. However, Israelis may possibly take part in the NSF evaluation process as panel members and/or external reviewers.
2. BSF is likely to fund any Israeli whose partner in this program is funded by the NSF, subject to the eligibility constraints, availability of funds, and advice of the screening panel.



3. NSF uses a conventional peer review system with expert panels and ad-hoc (external) reviews for full proposals. However, unlike the practice in Israel, panel members serve in an advisory capacity, and final decisions lie with the program officers and their management. These post-panel officials may introduce additional considerations such as whether the research topic already has support from the U.S. government, whether support from other NSF programs may be sought, etc.
4. Israeli applicants are advised that they should pay particular attention to the NSF evaluation criteria, http://nsf.gov/bfa/dias/policy/merit_review/, which may include issues such as broad impact, data management, etc. That are either missing in BSF/ISF applications, or have a greatly different meaning (particularly the term ‘broad impact’). **Failure to appropriately refer to such topics by the U.S. partner may be detrimental to the proposal, including early rejection without review.**

Submission:

The full proposals will be submitted to the program twice.

The U.S. scientist (only) will submit to the NSF using its regulations (http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg) and submission system (<https://www.fastlane.nsf.gov/>). **The US PI submission to the NSF MUST include the BIOGRAPHY (in the NSF format) and BUDGET (in the BSF format) of the Israeli partner as part of the auxiliary material.**

The Israeli scientist (only) will submit to the BSF, also providing the U.S. scientist information, according to its regulations and submission system: <http://www.bsf.org.il/ElectronicSubmission/GatewayFormsAndGuidelines.aspx?PageId=7&innerTextID=0%20>

Timetable:

Full proposals should be submitted to the BSF according to the following deadlines:



- **Basic Plasma Sciences and Engineering** – no later than 5 pm (Israel time) on Nov. 24, 2019 (NSF deadline is November 18, 2019).
- **Atomic Molecular and Optical Physics – Experiment and Theory; Gravitational Physics – Experiment and Theory; Integrative Activities in Physics; LIGO Research Support-** no later than 5 pm (Israel time) on Dec. 3, 2019 (NSF deadline is November 27, 2019).
- **Nuclear Physics – Experiment and Theory; Elementary Particle Physics – Experiment; Particle Astrophysics – Experiment; Computational Physics** - no later than 5 pm (Israel time) on December 8, 2019 (NSF deadline is December 3, 2019)
- **Elementary Particle Physics – Theory; Particle Astrophysics and Cosmology – Theory; Physics of Living Systems; Quantum Information Science** - no later than 5 pm (Israel time) on December 15, 2019 (NSF deadline is December 10, 2019).

Applicants are requested to acquaint themselves with the BSF regulation for this NSF-BSF program before they submit applications. The forms and regulations can be downloaded from the BSF website (www.bsf.org.il) under 'Guidelines and Forms'.

Questions regarding the applicability of the proposed research for this program should be directed by the U.S. partner to the program officer at the NSF.

Other questions regarding this special NSF-BSF program can be discussed with the BSF management by mail or phone (972-2-5828239): Dr. Rachel (Heni) Haring (heni@bsf.org.il ext. 110) or Ms. Yael Dressler (yael@bsf.org.il ext. 103). Questions regarding the online application system should be directed to Ms. Orli Rozenwajg (orli@bsf.org.il ext. 109).