Simons Collaborations in Mathematics and Physical Sciences

Request for Applications

The Simons Foundation’s Mathematics and Physical Sciences (MPS) division invites applications for the Simons Collaborations in MPS program.

Rationale: The aim of the Simons Collaborations in MPS program is to stimulate progress on fundamental scientific questions of major importance in mathematics, theoretical physics and theoretical computer science.

Basis for Awards: A Simons Collaboration in MPS should address a mathematical or theoretical topic of fundamental scientific importance, where a significant, new development creates a novel area for exploration or provides a new direction for progress in an established field. The questions addressed by the collaboration may be concrete or conceptual, but there should be little doubt that answering them would constitute a major scientific milestone. The project should have clearly defined initial activities and goals by which progress and success can be measured. The support from the foundation should be seen as critical for the objectives of the project.

The project should involve outstanding researchers with a range of career stages. Excellence of the scientific leadership is one of the main criteria in the selection process. The project should be organized and managed in a manner engendering a high level of collaboration.

Collaboration Director and Principal Investigators (PIs): Each collaboration is led by a collaboration director, who is expected to determine the scientific agenda, coordinate the scientific activities of the other members, determine (in collaboration with the other members) the scientific themes, coordinate a collaboration website, and organize collaboration meetings and activities as appropriate, including a two-day annual conference at the foundation. The director will be the foundation’s main point of contact for the activities of the collaboration and will be responsible for coordinating all administrative deliverables. The director is also responsible for monitoring the overall progress of the research effort and deciding on research directions and personnel as the collaboration evolves.

PIs are expected to perform research that advances the goals of the collaboration and to collaborate as appropriate with other members of the collaboration. PIs are also expected to assist the director and other PIs in fulfilling the additional collaboration obligations outlined above.
Attendance at the annual conference, monthly meetings and other lectures is expected for each collaboration member.

Proposals should specify a core group of founding PIs. Additional PIs may be added at later stages as the collaboration evolves. Inter-institutional and international collaborations are allowed.

**Level and Duration of Funding:** A Simons Collaboration in MPS is budgeted at up to $2 million per year for an initial period of four years. After a review in year three, when the scientific impact of the collaboration has been evaluated, an extension of three additional years may be granted. The foundation would allow the annual budget to vary somewhat from $2 million, as long as the total four-year budget is no more than $8 million.

**Allowable Expenses:** The funding provided under a Simons Collaboration in MPS may be used to support research expenses in the following categories:

- Up to one month of summer salary support and related benefits for the collaboration director and each PI/co-PI — These salary funds are not substitutional (cannot be used to relieve a university of salary costs) and cannot be used to reduce teaching loads below the departmental norm. They can only be used to supplement the salary similarly to a summer salary in the U.S. system.
- Conferences and working meetings appropriate to the needs of the collaboration.
- Teaching reduction down to the level of only one course/semester for the collaboration director — Teaching reduction for other collaboration members is not an allowable expense.
- Salary support and related benefits, including tuition support, for staff/research scientists and postdoctoral, graduate and/or undergraduate research assistants.
- Support for visitors and collaborators, including travel, meals and lodging expenses.
- Research equipment, supplies and other expenses directly related to the research, including computers, computer support, professional literature, publication expenses and professional membership dues.
- Collaboration-related domestic or international travel for collaboration members per the institution’s travel policies — Parking, hotel, taxi, registration and other related travel & conference costs are allowable.
- Support costs for a collaboration administrator.
- Other expenses related to the support and administration of the collaboration (i.e., web design).

Expenditures in other expense categories may be possible but must be approved in advance by the foundation.
Please see the foundation’s grant policies on our website for further guidelines: https://www.simonsfoundation.org/funding/policies-and-procedures/.

Please note that travel expenses are not capped at $4,000 per year per individual for this program.

The collaboration budget must include discretionary funds, amounting to at least 10 percent of the collaboration budget, to be held at the foundation and made available to be used at the discretion of the director for meetings, workshops, the addition of PIs to the collaboration and other related collaboration expenses. Costs for meetings and workshops held at the foundation (i.e., the collaboration annual meeting) will be paid directly by the foundation from the discretionary funds.

**Unspent Funds:** Funds allocated for postdoctoral fellows, graduate students or other junior researchers may be carried over from year to year, as appropriate, until the end of the collaboration. Unspent funds at the end of the collaboration must be returned to the foundation. The director and PIs may apply for up to a 12-month no-cost extension request for non-PI salary and fringe benefit funds unexpended at the conclusion of the collaboration.

**Reporting:** The director will provide the foundation with one overall progress report for the entire collaboration within 60 days after the completion of each grant year. The institution of each PI will be responsible for submitting a separate financial statement for each award within 60 days after the completion of each grant year.

**Eligibility:** The collaboration director should hold a faculty, or equivalent, position at a U.S. or Canadian institution with a Ph.D. program. PIs must also hold a faculty, or equivalent, position at an educational institution. There are no restrictions on the department and/or discipline of the director or PIs. PIs and other collaboration participants may be from non-U.S. institutions.

An individual may be part of more than one letter of intent (LOI) or full proposal, as long as all eligibility requirements are met. There is no LOI limit per institution or individual. For-profit institutions are not eligible to receive grant funds.

**Number of Awards:** The foundation expects to make up to two awards in 2018.

**How to Apply:** Please coordinate submission of the LOI and full proposal with the appropriate officials in accordance with institution policies. Please refer to the Application Instructions for further information on and requirements for submitting an application.
Letter of Intent:
Collaboration directors must submit an LOI through proposalCENTRAL (https://proposalcentral.altum.com/default.asp). LOIs are due by October 3, 2017, at 11:59:59 p.m. EST.

LOI Requirements Include:

- A project narrative, signed by the collaboration director on letterhead, outlining the topic, scientific approach and any relevant preliminary results — The project narrative should explain the logistics of the collaboration, including a brief discussion of the role of each founding PI. (Three-page limit, plus up to one page for references and figures, which can be embedded within the text.)

- An NIH- or NSF-style biosketch for each founding PI, which should include:
  o information about professional preparation, positions held and honors and awards;
  o a list of current and former collaborators, postdoctoral fellows supervised and Ph.D. students trained within the past five years; and
  o a list of up to ten relevant publications.

- A statement of current and pending support for all founding PIs (current and pending support should not be submitted for non-funded collaborators) — NSF format is sufficient. The statement should at least provide the award number, source of funding, title of award, dates of project and annual direct costs for each support item listed.

Notification of the status of the LOI will be sent by December 31, 2017.

Please note that the volume of interest in this program is such that the foundation is not able to provide advance guidance on potential proposals. We use the LOI stage to assess suitability and novelty. The foundation recommends submitting an LOI if an applicant believes his/her research meets the criteria outlined in the RFA.

Full Proposal:
A review of the LOI may lead to a request for a full proposal, which will be due by February 15, 2018, at 11:59:59 p.m. EST.

The collaboration director and his/her institution must submit the full proposal via proposalCENTRAL. The applicant PI/director will be the designated contact for the collaboration. The applicant will be responsible for coordinating all proposal attachments.
If awarded, each collaboration PI will be given an individual award and his/her institution paid separately. For each PI, a signed signature page, budget template and budget justification must be submitted with the application. The signed signature page will indicate that the program terms and applicable proposal attachments have been reviewed and approved by each PI and his/her institution.

NOTE: A submitted LOI will remain in the IN PROGRESS queue of the MANAGE PROPOSALS tab in proposalCENTRAL. If an LOI is approved, the full proposal application can be accessed under the IN PROGRESS queue. If the LOI status changes to LOI: APPROVED, click the EDIT button to gain access to the full application. See the Application Instructions for further information.

Full Proposal Requirements include:

- A summary of the scientific questions and research goals, including an outline of relevant previous work of each founding PI and others involved in the proposal, as well as a description of the planned research, including preliminary results (if relevant) and an organizational plan describing how the collaboration of PIs will be engendered and coordinated (12-page limit, plus up to two pages for references and figures, which can be embedded within the text).

- A detailed four-year budget and justification completed for the director and each founding PI and his/her institution (excludes non-funded collaborators). For founding PIs with subcontracts, a subcontract budget and budget justification for each subcontract must be included. All budgets must be in U.S. dollars.

- A summary budget, showing the annual amounts allocated to each PI and the director's discretionary fund, which should amount to at least 10 percent of the collaboration budget and will be held at the foundation for future use.

- An NIH- or NSF-style biosketch for each founding PI, which should include:
  - information about professional preparation, positions held and accolades;
  - a list of current and former collaborators, postdoctoral fellows supervised and Ph.D. students trained within the past five years; and
  - a list of up to 10 relevant publications.

- A statement of current and pending support for all founding PIs (current and pending support should not be submitted for non-funded collaborators). NSF format is sufficient. It should at least provide the award number, source of funding, title of award, dates of project and annual direct costs for each support item listed.

- 501(c)(3) equivalency determination letter from the IRS for international institutions, if available. Please see Application Instructions for further
Funding decisions will be announced by July 1, 2018, and funding will begin on September 1, 2018.

**Important Dates:**

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