

2023 Thomas-Lain Fund Scholarship Essay Competition

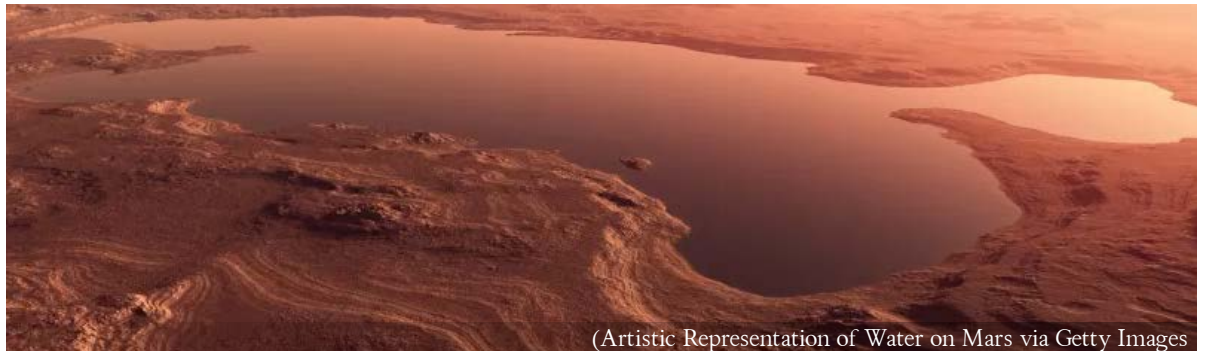
ELIGIBILITY

Any undergraduate physics/astronomy major or graduate student in the Department of Physics and Astronomy at the University of Pittsburgh who has a cumulative GPA of 3.25 or higher, has at least one full term of study left before graduation, and has NOT received this award previously is eligible to apply.

ESSAY TOPICS

UNDERGRADUATE STUDENTS:

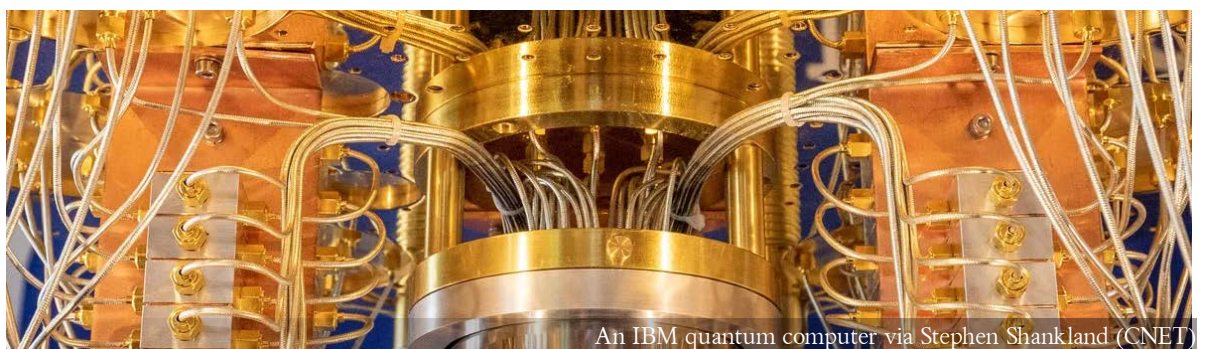
The idea of building a permanent station on Mars is popular. Discuss the feasibility of this. Consider getting there, energy requirements, food requirements, radiation, atmosphere, living requirements, etc. Try to be quantitative!



(Artistic Representation of Water on Mars via Getty Images)

GRADUATE STUDENTS:

Quantum computing is in the news! What is it? What are its advantages and disadvantages? What issues remain to be overcome?



An IBM quantum computer via Stephen Shankland (CNET)

REQUIREMENTS

- ▶ An **original research paper** written by the applicant in the style of articles published in the American Journal of Physics with no fewer than 4 and no longer than 5 pages long, double-spaced, using a 12-point font with 1" margins on all edges, submitted as a PDF file.
- ▶ All sources of material used in the essay must be referenced in the text, with a **list of references** (in AIP format) provided as an attachment. Figures are optional. Neither the list of references nor any figures will be counted against the length limitation.
- ▶ A **cover page** with the student's full name, mailing and email address, telephone number, and status (undergraduate major or graduate student), degree program, and the expected date of graduation.
- ▶ A copy of the student's **unofficial transcript**. This document can be requested for free from the Registrar's Office.

DEADLINE

4:00PM on Tuesday,
March 14, 2023

Access the Online Application via
[Pitt.ScholarshipUniverse.com](https://pitt.scholarshipuniverse.com) or
through the QR Code below:



<https://clurl.co/F0AB056E994BCC78>

EVALUATION

A departmental Thomas-Lain Fund Award Committee composed of three Physics & Astronomy faculty members appointed by the department Chair will evaluate the submitted essays and determine the number of awards to be made. A primary criterion in this evaluation will be the level of scientific understanding of the topic that the student who submitted the essay has demonstrated. Additional criteria are the organization and clarity of the presentation as well as the proper use of the English language, including spelling.

AWARD DETAILS

- ▶ Scholarship awards will be made on the basis of a science essay competition.
- ▶ Individual awards will range between \$1,000 and \$5,000 per year, based upon the amount available from the Thomas-Lain Fund and the number of awards made. For undergraduates, the award may be used for tuition, books, fees, campus housing, or other expenses directly related to the academic program.
- ▶ For graduate students, if tuition and all other fees are covered by University support, a stipend or award may be given directly to the student.

HELP & INFO

Questions regarding the competition can be directed to Mary Weiher.
Physics & Astronomy Department | 100 Allen Hall | mew200@pitt.edu

The Writing Center is available for general help and advice in essay writing
317B O'Hara Student Center | writingcenter.pitt.edu