



# SOCIETY OF PHYSICS STUDENTS

An organization of the American Institute of Physics

## Future Faces of Physics Award Proposal

<b>Project Proposal Title</b>	<b>Stories Under The Stars</b>
<b>Name of School</b>	Swarthmore College
<b>SPS Chapter Number</b>	6930
<b>Total Amount Requested</b>	\$500

### Abstract

Astronomy is one of the oldest natural scientists to exist, with intimate connections between physics and culture. Swarthmore's SPS chapter aims to extend the knowledge of astronomy outside of Western cultures, and make students, professors, and faculty experience other culture's constellations and astronomical stories under our inflatable planetarium.

### Proposal Statement

#### **Overview of Proposed Project/Activity/Event**

Through Swarthmore's newly-used inflatable planetarium, Swarthmore SPS will collaborate with SASA (Swarthmore African Student Association), the BCC (the Black Cultural Center), & SCS (Swarthmore Chinese Society), the IC-APIDAHMC (Intercultural Center - Asian Pacific Islander Desi American Heritage Month Committee) in two events to showcase African and Chinese constellations and astronomy. Under the planetarium, students, faculty, and professors will be able to not only learn and see these new constellations, but also learn stories surrounding African/Chinese constellations.

Our goal is to decenter Greco-Roman constellations that many folks may already know, and provide a new perspective to folks who want to learn about other cultures astronomy (or otherwise, engage in archeoastronomy!). Swarthmore SPS has been focused on branching our club to other aspects of our campus community and to not be bound within STEM groups. Collaborating with affinity groups, an action that we have been doing since we have won the previous Future Faces of Physics award, and increasing accessibility to physics and astronomy is our biggest priority. This event will bridge knowledge gaps of cultural astronomy.

## How Proposed Activity Promotes Physics Across Cultures

One of our biggest goals within our chapter of the Society of Physics Students @ Swarthmore is to branch out to our campus community and to not be stuck within the STEM bubble, and allow our discipline to be accessible to all. In doing so, we wanted to collaborate with affinity groups and highlight their culture in a way that relates to physics and astronomy.

Through *Stories Under the Stars*, we aim to promote cultural astronomy to our Swarthmore community, by decentering Greco-Roman/Western astronomy and highlighting how other cultures view our beautiful sky, through our planetarium. Not only will we be showcasing and projecting these cultural constellations (in particular, the Masai, Bantu, Bushmen, Zulu constellations for SASA and traditional Chinese legends for SCS), but storytellers within the affinity groups will also tell everyone a story about a particular astronomical constellation.

Through this event, folks from a wide breadth of diversity, will be able to recognize the existence of other culture's constellations, learn cultural astronomical constellations, and be together under the same sky under our planetarium.

## Plan for Carrying Out Proposed Project/Activity/Event

Angelo Phillipe Valencia '27 will lead the two *Stories Under the Stars* events and will be the main program director and narrator for the planetarium. He and Isaac Levenstein '26 are trained in using the inflatable planetarium and telescopes. Angelo has already contacted:

1. SASA/BCC (Swarthmore African Student Association + Black Cultural Center) to showcase African constellations
2. SCS/IC-APIDAC (Swarthmore Chinese Society + InterCultural Center - Asian Pacific-Islander Desi American Committee) to showcase Chinese constellations

For these two events, progress will be monitored by multiple point contacts (in a big group-chat) regarding how funding is going cross-clubs, expectations for supplementary information regarding African/Chinese constellations, and the logistics of food and locations. A format of obligations for the SPS/SISA/IC collaboration that Angelo plans to continue are:

1. SPS: Set up the planetarium and telescopes in the InterCultural Center Dome + Angelo will lead narration
2. SISA (or SASA/SCS): Print out handouts for folks entering the planetarium and buy food & drinks for everyone
3. IC (or BCC): Send out campus wide emails and reserve the space for the planetarium

We expect full hands of the six board members of SPS, and also most of the boards of SASA & SCS to make the planetarium showing to be as smooth as possible.

In terms of advertising, we have the ability to send emails and create big posters to the entire campus community. With the first SPS/SISA *Stories Under The Stars*, we sent out an email to the campus, and in less than 12 hours, all RSVP slots were filled.

## Project/Activity/Event Timeline

### Stories Under the Stars II: African Constellations

1. **Pre-Semester:** Confirm with SASA/BCC if they want to do a collaboration
2. **January:** Reserve IC Dome & Terrace + Figure out food & Drink situation
3. **Early February:** Confirm food & drinks + print out supplemental information + send out campus email + print posters
4. **Event Date:** Mid February!
5. **Day of Event:** Set up food, planetarium in the IC dome, and telescopes out on the terrace, and get a successful event!!

### Stories Under the Stars III: Chinese Constellations

6. **Pre-Semester:** Confirm with SCS/IC-APIDA if they want to do a collaboration
7. **March:** Reserve IC Dome & Terrace + Figure out food & Drink situation
8. **Early April:** Confirm food & drinks + print out supplemental information + send out campus email + print posters
9. **Event Date:** Mid April!
10. **Day of Event:** Set up food, planetarium in the IC dome, and telescopes out on the terrace, and get a successful event!!

## Activity Evaluation Plan

We have achieved this event of promoting different cultures with a collaboration between SPS, SISA (the Swarthmore Indigenous Student Association), and the Intercultural Center (an official Swarthmore-affiliated center). With Angelo Phillippe Valencia '27 the leader of the first *Stories Under The Stars*, we sent a school-wide email to RSVP for this event a week prior to the event. **70 people RSVPed in less than 12 hours.** Across the college, the SPS/SISA board heard anecdotes of wishing to sign up for the event, but were shocked that the RSVP slots had filled up fast.

With a diverse range of cultures from the students who RSVPed, under our planetarium, each and every one of them learned about Navajo constellations, a story about how the stars were created through the Navajo perspective (the story of the Coyote Star), and also basic astronomy.

After each 30 minute viewing, with four viewings in total, each and every student were in awe with the planetarium, and many students felt inspired to research more about constellations in other cultures and dive into the subject of *archaeoastronomy* and science as interdisciplinary disciplines.

## Budget Justification

We ask for \$500. Knowing that we receive half of the funds, we aim to split it up into:

\$125 - Catering for *Stories Under the Stars II* (SASA/BCC)

\$125 - Catering for *Stories Under the Stars III* (SCS/IC-APIDAHMC)

When we receive the \$250, we want to require the folks running the planetarium to wear volunteer t-shirts to indicate that we are the ones hosting the event! The first *Stories Under the Stars* had a little difficulty in identifying who was actually running the event, so we plan to create/buy tshirts for SPS members so that folks can ask questions about the planetarium.