

Augmented REU ([Link to Lol](#))

Target Problem:

- REUs good program, but suffers from same inequalities as general physics research. How can we ensure the program *best* supports the target demographics?

Develop Targeted Solutions:

- APS Bridge Program has successful network. Can further formalize pipeline to graduate school.
- UChicago REU program has special workshops to help in this direction
- Can connect with Simons-NSBP program
- Upgrade projects who need person-power can provide a space for this effort
- How can we support students with non-traditional immigration or legal status (DREAMers, etc.)
- Cal Bridge program, Vanderbilt FISK

Person-power:

- Lol Authors: **Johan Bonilla**, Claire David, Abdullah Ezzat, Michael Kagan, Sam Meehan, Sara Simon
- Welcoming more help and input

Originally submitted as CEF2+3

Looking for new ideas,
refining current ones

Aim and Motivation

Facilitate increasing the number of underrepresented minorities (URMs) in particle physics that is focused on short-term and well-defined **technical projects**

- Take advantage of critical timelines and need for personpower
- Hardware projects are not easy to come by, very rare for UGs

Beyond an REU

- Distributed mentoring, institutes can share load+costs
- Project-based, high impact by design

Considerations and Improvements

- Do we need to solely stick to technical projects?
- Another aim is a formal pipeline to graduate school for URM, can be more aggressive/forward in language from beginning

Anecdotal Experiences

Part of motivation is that REUs can be improved

- How well do REUs work?
- Do they actually impact URMs more than non-URMs participants?
- How can we leverage the training invested in participants for their own sake?
- How can we collaborate with other existing efforts to avoid duplicating effort and expanding network between target demographics?

Trouble finding literature and statistics from REUs

- Some example programs listed, but need to connect them
- Are there standard measures of impact?
- We have institutes with REUs in Snowmass, can we request access?

Section needs expanding and revising

Pipeline

Application-based, then observe student in research environment

-- Shouldn't this be the ideal way to evaluate a student for entrance into a PhD (research-oriented) program?

-- Why then is it tough for participants of REUs to succeed in graduate school applications?

Idea: Use program as preliminary entrance to graduate school network

-- Match student with institute for long-term research

-- Removes high-stress affecting URMs particularly acutely related to grad school applications

Program Details

Timing: upgrades may have tight schedules, independent of scholastic calendars

- Remove timing barrier, rolling applications with varied duration
- Needs careful planning and contingency
- Can provide opportunity for non-traditional career paths

Target Participants

- Aim to increase URM participation in HEPA
- Can it be open to *any* person regardless of nationality, immigration status?

Do funding agencies allow this or must funding for such a thing need to be private?

What's in it for the mentors?

- Can create culture of excellence in DEI
- Provide academics with much-needed hands-on experience teaching/mentoring