# COMMITTEE: COMMITTEE ON THE INTERESTS OF SENIOR PHYSICISTS

### REPORTING COMMITTEE MEMBER / POSITION

Randy Knight, Area Committee Chair

#### GOALS FOR PAST YEAR

a. Current Year: Bring the committee back up to full strength

For various reasons, the committee had dwindled to two people at the start of this year, and the committee was on the verge of evaporating. We successfully added three new members in the spring of 2022. Our goal is to work with the Nominating Committee to make sure we add two more members in Winter 2023.

b. Next Year: Continue to sponsor sessions at meetings

The Committee is sponsoring an invited session at WM23. A session at SM23 is being planned.

c. Long Range: Continue to nurture the AAPT Speaker Bureau

The Committee wishes to continue organizing and overseeing the AAPT Speaker Bureau. Gordon Ramsey will look into how many potential speakers can give virtual talks and to publicize this.

### COMMUNICATION AND MEETINGS OF THE COMMITTEE (PAST YEAR)

The WM22 committee meeting was a virtual meeting held December 13, 2021. There was confusion over getting this meeting set up, with the result that there were two different links. The majority of the committee managed to meet using one link, but one committee member and several friends of the committee had a different link and ended up having their own separate meeting.

The SM22 committee meeting was held in person in Grand Rapids on July 11, 2022. Four committee members attended, as did five friends of the committee.

### WM 22 SESSIONS

The committee did not sponsor a session at WM22.

### SM 22 SESSIONS

The committee sponsored a panel discussion "Life Beyond Physics" at SM22. Five panelists, with audience participation, talked about what they were doing after "retiring" and how they were still using their physics and science background. Feedback about the session was good, but attendance was low – only about 10 people. We attribute this to the fact that the program showed only the session title and did not list the panelists. All five panelists are well known in the AAPT community, including award winners and a former AAPT President. We feel that attendance would have been much higher had the panel member's names been in the program – which they used to be in the days of printed programs – and we call this to the attention of those who design the program.

# WORKSHIPS WM22 OR SM22

The committee did not sponsor workshops

### **OTHER COMMITTEE EFFORTS**

None

### **SHORT RANGE GOALS (NEXT YEAR)**

a. Current Year: Bring the committee back up to full strength

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2022. Our goal is to work with the Nominating Committee to make sure we add two more members in Winter 2023.

b. Next Year: Continue to sponsor sessions at meetings

The Committee is sponsoring an invited session at WM23. A session at SM23 is being planned.

### LONG RANGE GOALS (3-5 YEARS)

Long Range: Continue to nurture the AAPT Speaker Bureau

The Committee wishes to continue organizing and overseeing the AAPT Speaker Bureau. Gordon Ramsey will look into how many potential speakers can give virtual talks and to publicize this.

#### HIGHLIGHTS AND SUCCESSES

Nothing not already reported

### ADDRESSING CHALLENGES

It is difficult to find people to serve on this committee – part of the reason why it was down to two members. By the time AAPT members are "senior," and especially after they've retired, few are willing to commit to continuing to be active and to attend national meetings at least once a year for the next three years. Lack of travel support after retiring may also be an issue.

It is unclear to committee members whether "the interests of senior physicists" means "things that are interesting to senior physicists" or "serving the needs of senior physicists." This committee has been around awhile, and no current committee member or friend knows what the intent was of the founding members. For the most part, sessions sponsored by the committee in recent years have been simply topics that were interesting to one or more committee members. But those are no different than topics interesting to all physicists, so the fact that we're senior physicists has not been relevant. Perhaps that's OK, but we would like to know if the Board has any thoughts as to what the charge to this committee is.

IDEAS AND RECOMMENDATIONS FOR IMPROVING AND EMPOWERING AREA COMMITTEE FUNCTION

IDEAS AND RECOMMENDATIONS FOR IMPROVING AND BUILDING NATIONAL CONFERENCE PROGRAMMING

IDEAS AND RECOMMENDATIONS FOR ENGAGING MEMBERS IN LEADERSHIP ROLES, INCLUDING AREA COMMITTEES, OTHER BOARD COMMITTEES, AAPT PROGRAMS, AND/OR SERVICE ON THE AAPT BOARD.

# **Review Board Response**

This committe has struggled in years past to find members and their concerns are ligitimate the committee asks the board for claification of its charge as the committee is uncertain as to whether they should focus on interests of retired phyicists or those of senior physicist who are still working. There is a concern that once a person is retired the exspense of attending 1 meeting per year maybe prohibitive due to lack of support. One issue with their summer session was low attendance which they attribute to poorly advertised in the program the 5 panelists are well known and respected in their fields. ONly 10 people attended the discussion and it is suggested that the program list the names of session contrubtors as in the past to encourage attendance. Virtual committee meeting in December of 21 were an issue as there were 2 Zoom links leading to a spilt meeting for friends and committee members.

# COMMITTEE: COMMITTEE ON GRADUATE EDUCATION IN PHYSICS

### REPORTING COMMITTEE MEMBER / POSITION

Shannon Willoughby, Area Committee Chair

### GOALS FOR PAST YEAR

Our main goal is to develop a survey to give to Grad School Shopper that they in turn can send out to universities that are a part of the grad school shopper website. The survey will contain questions about things like cost of living, climate of department, and family friendly policies.

### COMMUNICATION AND MEETINGS OF THE COMMITTEE (PAST YEAR)

We worked via email. The in person meeting in Grand Rapids also was effective, even though the 7 am meeting time was rough.

### WM 22 Sessions

Changing Graduate Admissions: A Topical Discussion; Professional Skills for Students; I am not sure about attendance or impact.

### **SM 22 SESSIONS**

Graduate Students as Change Agents. This was well attended, around 15 people. We would sponsor this again.

### WORKSHIPS WM22 OR SM22

None that I know of.

# **OTHER COMMITTEE EFFORTS**

None that I know of

### **SHORT RANGE GOALS (NEXT YEAR)**

Complete survey previously mentioned, send to grad school shopper.

### LONG RANGE GOALS (3-5 YEARS)

Continue talking about issues related to equity and diversity in graduate school and in graduate school admissions. We would also like to track how graduate school admissions continue to change after the pandemic. Finally, we would also like to grow the committee.

### **HIGHLIGHTS AND SUCCESSES**

That graduate school admissions do seem to be changing, and that issues of equity and inclusion seem to be more commonly talked about that previously.

### ADDRESSING CHALLENGES

Having enough members.

IDEAS AND RECOMMENDATIONS FOR IMPROVING AND EMPOWERING AREA COMMITTEE FUNCTION

IDEAS AND RECOMMENDATIONS FOR IMPROVING AND BUILDING NATIONAL CONFERENCE PROGRAMMING

IDEAS AND RECOMMENDATIONS FOR ENGAGING MEMBERS IN LEADERSHIP ROLES, INCLUDING AREA COMMITTEES, OTHER BOARD COMMITTEES, AAPT PROGRAMS, AND/OR SERVICE ON THE AAPT BOARD.

# **Review Board Response**

The goal of developing a survey to give to Grad School Shopper Website that can be available to potential graduate school attendees is an excellent goal. Have you thought of using communities for communication in lieu of emails so that other AAPT members can observe your committee's work. This might address your concern re number of members needed on the committee. Your continued discussion of issues re DEI in graduate schools and their admission policies is in alignment with the new strategic plan of AAPT.

# COMMITTEE: COMMITTEE ON PHYSICS IN UNDERGRADUATE EDUCATION

### REPORTING COMMITTEE MEMBER / POSITION

W. Brian Lane, Area Committee Chair

#### GOALS FOR PAST YEAR

Establish presence on AAPT Communities
Offer hybrid virtual/in-person committee meetings

### **COMMUNICATION AND MEETINGS OF THE COMMITTEE (PAST YEAR)**

AAPT Communities was fairly effective, especially once we established a public group for friends of the committee.

Hybrid meetings were well supported at the AAPT Summer Meeting and did not generate concerns.

### WM 22 Sessions

A3: Biophysics in the 21st Century Curriculum I

A8: Quantum Mechanics I

A3.1: Biophysics in the 21st Century Curriculum II

A8.1: Quantum Mechanics II

We would be willing to sponsor similar sessions again.

### SM 22 SESSIONS

CA: Art and Science of Teaching

Integrating climate, energy, sustainability in the classroom and beyond

We would be willing to sponsor similar sessions again.

### WORKSHIPS WM22 OR SM22

PICUP: Integrating computation into Astronomy courses

PICUP: Integrating computation into upper-level physics courses

A written instrument to assess learning assistants' PCK-Q

### **OTHER COMMITTEE EFFORTS**

None.

# SHORT RANGE GOALS ( NEXT YEAR)

Sponsor sessions and workshops.

### LONG RANGE GOALS (3-5 YEARS)

Assist Executive Office in efforts to re-examine the undergraduate physics curriculum.

### HIGHLIGHTS AND SUCCESSES

The friends of the committee community has been well received.

#### ADDRESSING CHALLENGES

Questions that arose during our summer committee meeting:

Summer 2022 sessions are officially just 1 hour long. This means invited sessions with 30 min talks extend into scheduled breaks. Is this a COVID-related anomaly or the plan for future meetings?

How are attendees expected to navigate virtual and in-person abstracts and talks?

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND EMPOWERING AREA COMMITTEE FUNCTION

Resources/links are difficult to find. We have to search through emails from AAPT and then organize the files ourselves. If we could have a single shared folder for AAPT committee chairs, we could bookmark it and return to as needed.

#### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND BUILDING NATIONAL CONFERENCE PROGRAMMING

The new process for session submission and approval is still not clear.

IDEAS AND RECOMMENDATIONS FOR ENGAGING MEMBERS IN LEADERSHIP ROLES, INCLUDING AREA COMMITTEES, OTHER BOARD COMMITTEES, AAPT PROGRAMS, AND/OR SERVICE ON THE AAPT BOARD.

We support re-examining committee sizes and term lengths for vice-chair, chair, and possibly previous chair.

# **Review Board Response**

The fact that your committee has successfully navigated the AAPT communities to include friends of the committee is to be commended as is the use of virtual and in-person committee meetings.

With the changing approach to education because of the lockdowns and Covid restrictions it is

appreciated that your committee is willing to assist the Executive Office in the reexamination of the undergraduate physics curriculum.

In response to your inquiry of the schedule for the Summer 2022 sessions and subsequent sessions the program scheduling committee suggested the 1 hour long format. Invited sessions are now 25 minutes in length. If sessions are more than 2 invited or invited plus contributed, the sessions can be blocked as 2 1-hour blocks as before. Your concerns regarding navigations of the virtual and in-person abstracts, and talks has been a concern of others as well. We will continue to fine tune the programing process to hopefully alleviate the issue in future meetings.

The development of a single shared folder with resources/links that could be bookmarked is an excellent suggestion and has been discussed at length. It is hopeful that the hiring of a part time program assistance will make session submission, approval and scheduling more clear.

Excellent suggestions for improving the process of national meetings and committee communications.

# COMMITTEE: COMMITTEE ON EDUCATIONAL TECHNOLOGIES

### REPORTING COMMITTEE MEMBER / POSITION

Andrew Duffy
Area Committee Chair

#### GOALS FOR PAST YEAR

One small goal we had for 2022 was to create a FRIENDS group for the Committee on the Communities platform, and that has been done.

# COMMUNICATION AND MEETINGS OF THE COMMITTEE (PAST YEAR)

Meetings - there was one virtual CET meeting associated with WM22, which had several attendees. For SM22, not everyone was attending the conference in person, so we had a virtual meeting in advance of the conference and then an in-person meeting at the conference. These were both lightly attended. The time for the in-person meeting seemed to be up against other conference events (e.g., the demo show, which was off-site) so that may have had some impact on attendance.

In general, most of the communication among the committee members has been by e-mail. CET tends to also have a significant group of friends of the committee. Somehow, we didn't seem to have a contact list at the start of 2022 so I created one myself. All those people were invited to the three committee meetings (two virtual, one in-person) and that did help us to get a few more people there.

We do have a Communities group but so far have not made much use of that. We also requested a Communities group for the Friends of the Committee and that has been created, but it has yet to have a post.

### WM 22 Sessions

I really don't know what happened with WM22. The Committee on Educational Technologies proposed several sessions but it seemed like only one ran as proposed. This was "Integrating Computation in Labs at All Levels" which was run by Ernie Behringer. That session was popular, and was split into two parts. The online nature of the conference seems to have disrupted the usual CET offerings.

### **SM 22 SESSIONS**

With the return to an in-person conference, it seemed like things were somewhat more normal for the committee offerings. The Committee on Educational Technologies sponsored several sessions that ran at the conference, several of which were broken into 2 or even 3 parts because they got so many submissions. "Smartphone-based labs" was run by Andy Gavrin; "Computation and modeling to non-science majors" (1 & 2) was run by Jay Wang; "Building a Quantum Information Science and Engineering Curriculum for a Diverse Community of Learners" (1 & 2) was run by Todd Zimmerman and Chris Porter; "Educational Technology as a Double-Edged Sword" was run by Katie Ansell; "Best Practices in Educational Technology" (1, 2, & 3) was run by Duncan Carlsmith; "High Altitude Ballooning" was run by Erick Agrimson; "Sports Meets Physics" (1 & 2) was run by Andres Bresges; and the session titled "PICUP Capstone Conference Report" was run by Brandon Lunk.

The session names were reversed for SM22, but CET runs the Effective Practices (contributed) and Best Practices (invited - this was Katie Ansell's session this time) at every conference and Effective Practices often ends up being split between multiple sessions. Some of these others may well run again - in general, they were well attended.

### WORKSHIPS WM22 OR SM22

WM22 - The Committee on Educational Technologies proposed a few workshops for WM22 but it looks like just one was run. That was "Creating Curricular Materials to Accompany Physics Simulations" which was offered virtually for about 8 attendees. The workshop was run by Andrew Duffy and Manher Jariwala of Boston University, and Emily Allen of Governor's Academy. This one was well received by the participants.

SM22 - The Committee on Educational Technologies sponsored several workshops that ran at SM22. The in-person workshops included "PICUP: Integrating Computation into Upper-Level Physics Courses" which was run by Todd Zimmerman; "The half-flipped classroom: Just in Time Teaching" (17 attendees) by Andy Gavrin of IUPUI; "Creating Curricular Materials to Accompany Physics Simulations," run by Andrew Duffy of Boston University (7 attendees, including one virtually from Cambodia); and (I think) one on "Phone Physics" (25 attendees) by Dave Rakestraw. There were also two CET-sponsored workshops that were run virtually a couple of weeks after the in-person meeting, "Creating Physics Online Learning Modules from Open Education Resources", by Zhongzhou Chen of UCF, and "Fun, Engaging, Effective, Research-Validated Introductory Labs and Demos" by David Sokoloff and Ron Thornton.

I am not certain of the number of attendees at every workshop (AAPT probably knows this information a lot better than I do) but there does seem to be fairly good attendance at the Educational Technology workshops, in general - there is a lot of interest in these topics, generally, among the conference attendees. Some of these workshops will definitely be offered again (and are already on the list for either WM23 or SM23).

### **OTHER COMMITTEE EFFORTS**

No other efforts - we were short 1 committee member, and also did not have a vice-chair, until after SM22, so we just focused on the CET-sponsored sessions and workshops at WM22 and SM22 (and being ready for WM23).

### SHORT RANGE GOALS ( NEXT YEAR)

1. Continue to offer interesting sessions and workshops at the national meetings. Education Technologies seem to be continually evolving so there are always new things to talk about and learn about that fall under the Committee on Educational Technologies umbrella.

### LONG RANGE GOALS (3-5 YEARS)

1. It would be good to have more stability in the membership of the committee and the right set of ending dates for the committee members. As of right now we have four people who are listed with ending dates of 2024 (and nobody whose term runs out in 2023), but also one of our 2024 people has retired from his position at his university and wants to resign from the committee, because he has no way to fund trips to the national meetings. It would be helpful to get it set so the committee has the correct number of members and regular turnover - some assistance from AAPT to get that in place is going to be necessary. As of now we don't have other long-term goals, but this is something the committee can discuss at the committee meeting that takes place at WM23.

### HIGHLIGHTS AND SUCCESSES

I would say that we were all excited about the return to in-person national meetings, starting with SM22. The Committee on Educational Technologies had a solid presence at that meeting, sponsoring quite a few sessions and workshops. We hope to continue having such a significant impact at future meetings.

### ADDRESSING CHALLENGES

As mentioned above, we struggled a bit in the first half of the year with being understaffed and also not having a vice-chair until after SM22. We appreciate the help of AAPT and the folks on the Nominating Committee for helping to address those issues.

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND EMPOWERING AREA COMMITTEE FUNCTION

This is all about the annual report process. In response to the e-mail to chairs asking us to complete the committee annual report via a Google form, I replied with a few comments. I will repeat those here just so there's a record of it.

The idea of submitting the annual report by completing a Google form is fine, but with the Google form set up with multiple pages (I'm currently on page 5 of the form) and no ability to look ahead to see what the questions are, it is very challenging to complete. It took me about a minute to fill out the first page, and then when I got to page two I realized it was probably going to take me a few days to compile the information. So, being able to see all the questions, somehow, right off the bat would have been a lot better. And then I didn't know that there was going to be 3 more pages (at least, maybe there are more?) after that. Please, at least, send all the questions out in advance so we know ahead of time what the questions are.

I also feel like I'm being asked to provide information (like number of attendees at sessions and workshops) that I don't know and that AAPT knows already. Someone at AAPT must have a spreadsheet with all of this information.

Also, I think it would be a good idea to provide the questions on the annual report form to incoming chairs at the winter meeting, so everyone knows what to expect, and we can discuss these issues (like short-term and long-term goals) at committee meetings and so the incoming chairs will know what information to keep track of throughout the year.

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND BUILDING NATIONAL CONFERENCE PROGRAMMING

No comments on this one - I think the national conferences are working pretty well, though.

# IDEAS AND RECOMMENDATIONS FOR ENGAGING MEMBERS IN LEADERSHIP ROLES, INCLUDING AREA COMMITTEES, OTHER BOARD COMMITTEES, AAPT PROGRAMS, AND/OR SERVICE ON THE AAPT BOARD.

One thing that would be helpful is just making sure everyone, especially SM and WM attendees, are aware of how AAPT is structured. The work of the area committees is very important in how the national meetings end up being organized, but it's possible for attendees to go through a meeting with absolutely no awareness of what is happening behind the scenes, in committee meetings. Raising the profile of these committee meetings and making sure everyone knows that they are welcome to attend area committee meetings, even if they are not committee members, would be a positive step.

# **Review Board Response**

Getting a community's page for friends as well as committee members is no small task. One method of increasing communications would be to suggest that a post be made every two weeks by a committee member. Your comments about the importance and relevance of CET is spot on. There are some many changes occurring in the method in which education is being approached following the pandemic that explains the fact that your sessions and workshops were well subscribed.

Continue to offer the option of virtual meetings in conjunction with the face-to-face meetings. It is becoming very apparent that hybrids are becoming more prevalent.

Committee membership is an issue for many area committees due to lack of support to attend meetings, which is why your committee like others were short members last year. Encouraging the use of virtual

meetings may address the problem.

The use of the new google form was designed to make it easier for committee to submit reports. If you have specific suggestion as to how to improve the process, please feel free to share them. the questions are. I also feel like I'm being asked to provide information (like number of

Area committees are the backbone of the association. It has been suggested that a flyer describing each committee's charge, and meeting time be provided at the registration desk. Raising the committee's profile would no doubt increase interest and involvement for committees thank you for your suggestions and very thorough report.

# COMMITTEE: COMMITTEE ON SCIENCE EDUCATION FOR THE PUBLIC

### REPORTING COMMITTEE MEMBER / POSITION

Joseph Kozminski, Area Committee Chair

#### GOALS FOR PAST YEAR

Continue lobby physics video collection; Find ways to engage in outreach to local community at AAPT meetings

### COMMUNICATION AND MEETINGS OF THE COMMITTEE (PAST YEAR)

CSEP was not seeing very good attendance at its virtual meetings. The virtual meeting before WM22 had only about 8 attendees. The timing was challenging, being short notice around exam time in Dec. We heard from several people afterward that they weren't expecting a December meeting and didn't look at the details until the meeting had passed. Before SM22, we only had 11 in attendance. We were disappointed in the number of friends attending and frustrated by the challenges communicating with friends of the committee. We were among the committees that requested a FRIENDS page on Communities, and we appreciate that this is available now. Unfortunately, the Fall got busy and we haven't used it as effectively as we could have.

The live meeting at the summer session was well attended with about 25 in attendance, including a number of new friends, a couple of whom volunteered to organize sessions and workshops at SM23. There is definitely interest in CSEP, but we are unsure how to generate more excitement around virtual meetings between national meetings. This is something to work on going forward.

### WM 22 SESSIONS

Teaching Quantum to K-12 (Well attended (~20), lots of good interaction and good speakers. Might be a good topic to bring back for future conferences)

Lobby Physics (About (~12-15) in attendance)

Physics in Unexpected places (~15 in attendance, organizers did not find invited speakers as intended)
Physics and the Arts (~20 in attendance, fun, interactive session. Caroline Sealfon would be good to bring back for a future talk or workshop on improv skills to improve sci comm)

Integrating climate, energy, sustainability in the classroom and beyond (scheduled, but no report out. not sure if this session ran)

### SM 22 SESSIONS

Outreach through social media (40+ in attendance. Invited talks were very well done, focusing on TikTok and Twitter. The audience was engaged and asked a lot of questions with a number of people sticking around to continue the discussion after the session ended.)

Safe Solar Observing Share-a-thon (Outreach event co-sponsored by CSEP during the lunch hour outside the conference center. Many people came by throughout)

There was some technical difficulty with scheduling summer sessions. For some reason, even though the SM sessions were recorded in the planning spreadsheet, the New Orleans sessions got repeated for summer in the system and had to be removed. The "Balancing Live and Virtual Outreach" session got left out in the confusion. The Physics for Humans session was cancelled since invited speakers could not be found.

### WORKSHIPS WM22 OR SM22

WM22:

Teaching Quantum to K-12 (14 attendees, successful workshop, even in virtual format) LIGO and Interferometers (Did not run in virtual format)

SM22:

Green and Renewable Energies (12 attendees, very active and engaging workshop. Participants found it useful and gave positive feedback)

Science Communication (workshop ran, but no report back to the committee)

### **OTHER COMMITTEE EFFORTS**

In the spring, we were involved in trying to organize an outreach event in collaboration with several other committees on Safe Solar Observing, led by Richard Gelderman. Several committee members volunteered for the event, and there was steady traffic throughout the hour. This was a very successful first outreach activity. We are hoping to arrange a "Physics on Tap" event at a local brewery in Portland for WM 23. We also engaged with JNIPER (Joint Network for Informal Physics Education Research) hosted by APS. The group was ramping up this fall, and they are having their first event in December. We have communicated to the committee and friends about it. This may be a fruitful partnership going forward.

### SHORT RANGE GOALS ( NEXT YEAR)

Include at least one session dealing with some aspect of climate change at every meeting Continue outreach efforts at AAPT meetings

### LONG RANGE GOALS (3-5 YEARS)

Host an outreach event at every meeting in collaboration with other committees and groups e.g. Contemporary Physics, PIRA, etc.

Look into building a repository of resources for teaching science communication to students Rethink the lobby physics video repository to generate more interest in submissions and use

### HIGHLIGHTS AND SUCCESSES

One of the high points was participating in the Safe Solar Observing outreach event at the summer meeting. We had been discussing an outreach event at the Grand Rapids Meeting since the original Grand Rapids meeting. The event itself changed significantly from the original plans in 2020, but we were excited to collaborate with other committees on a successful outreach event. There is discussion of a reprise of this outreach event in Sacramento.

Other high points included excellent turnout, including new friends, at SM23 and beginning some discussions with JNIPER, which could prove to be a nice partnership.

### ADDRESSING CHALLENGES

Virtual meeting attendance was an issue, and we need to find some way to bring people out for future virtual meetings like having some kind of focused discussion or activity along the lines of a coffee hour. We had some issues with getting the summer meeting sessions put into the schedule correctly. However, this should be resolved since it sounds like going forward the planning spreadsheet will be automatically uploaded into the system instead of the multistep process that used to occur.

We have had some issues communicating with friends since the end of the listserv, but we got a FRIENDS page on Communities set up so we hope that friends will start joining that.

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND EMPOWERING AREA COMMITTEE FUNCTION

The past chair model works well for CSEP. That is, the current chair remains in a support position as past-chair when they roll off the chair line. This helps with continuity on the committee. Even though I am rolling off CSEP after WM23, I am still planning to play the role of past-chair and be engaged with CSEP

and support the new Chair in 2023. I don't know if this model is sustainable in its current form, however. Past-chair is not an official role on area committees so faculty who need professional service for promotion and/or tenure may not be inclined to stay on as past-chair if they are no longer technically on the committee (which is the case unless they came onto the committee as Vice Chair) and they don't get any "credit" / official recognition for the past-chair role.

Possible solution -- make past-chairs ex officio members for that 4th year if they roll off the committee. Then, they would still be a member of the committee and have a title, which AAPT could recognize with a letter noting their continued involvement on the committee.

I'm happy to discuss this further -- Joe Kozminski (kozminjo@lewisu.edu)

IDEAS AND RECOMMENDATIONS FOR IMPROVING AND BUILDING NATIONAL CONFERENCE PROGRAMMING

IDEAS AND RECOMMENDATIONS FOR ENGAGING MEMBERS IN LEADERSHIP ROLES, INCLUDING AREA COMMITTEES, OTHER BOARD COMMITTEES, AAPT PROGRAMS, AND/OR SERVICE ON THE AAPT BOARD.

# **Review Board Response**

One of the most visible committees for AAPT is the CSEP with their use of presentations to the public be they in a video format, in face-to-face presentations at the national meetings or within their home communities.

Continue to be ambassadors for AAPT through social media, community postings, hosting of coffee hours and community presentations at local schools, malls etc. With decreasing enrollment in physics at all levels sparking interest though this committee's work is invaluable. The upcoming solar eclipse is and excellent example of community outreach. Your participation in demo shows with PIRA is always a well-attended event at National Meetings. The plan to collaborate with others will only strength to APPT community. Please share suggestions to enhance virtual or hybrid meetings as they may become an option soon due to the high cost of attending a face-to-face meeting.

Thank you for the successful piloting of the vice-chair, chair and past-chair model for a committee. Past chairs are members of the committee and not ex officio members. Perhaps this was not clarified when the past chair model was approved by the Board of Directors.

# COMMITTEE: COMMITTEE ON PHYSICS IN HIGH SCHOOLS

### REPORTING COMMITTEE MEMBER / POSITION

Debbie Andres, Area Committee Chair

#### GOALS FOR PAST YEAR

Our main goal for the year was to integrate more programming into the National Meetings that was focused on resources for practitioners. This meant we were also committed to addressing barriers and proposing changes to the National Meeting structure that would break down some of these barriers. We also were focused on recruiting more members that are local to the AAPT meeting locations.

### COMMUNICATION AND MEETINGS OF THE COMMITTEE (PAST YEAR)

We mostly communicated through email and Zoom meetings. Prior to every meeting I set up an agenda with goals and throughout the meeting we made a list of action items that were assigned to committee members. It was important to keep the meetings at the allotted amount of time (either 60 or 90 minutes). I also communicated through Twitter when advertising our virtual committee meetings or coffee hour we hosted. In early Fall 2022, we also sent out a newsletter that was published to get the word out more about what the committee was up to.

The in-person meetings shifted focus from being only on programming to coming up with solutions and getting to know the membership.

### WM 22 Sessions

The following sessions were proposed at the WM22: Waving in the new semester (Session), Literacy in Action Integrating Quantum (Session), Writing problems -Regular, AP. Contests (Session), Electrifying your Second Semester Curriculum (Session). I do not have much detail on their impact and attendance as I was intentionally keeping track of that information. In the future, I will be more conscious of this.

### SM 22 SESSIONS

I was present for two of the sessions, both of which were piloting a more interactive model for the sessions. Using Desmos in the Physics Classroom had two invited speakers that shared a ton of resources with participants and we allocated time at the end for participants to work with the two speakers and practice using Desmos activities. The Methods of Remediation in the Physics Classroom had three invited speakers that shared a lot of resources that could be used in the classroom. Participants were also given time at the end to work in groups and begin brainstorming how to incorporate remediation practices into their classroom. This interactive session format allowed for more audience participation and for participants to feel like they were walking away from the session learning something.

### WORKSHIPS WM22 OR SM22

The following workshops were proposed: Build a radio telescope measure the speed of the earth around the sun! (Workshop), Teaching Waves with PEER Physics Open Source Resources for General Physics (Workshop), Muon Activities in the Classroom (Workshop), Group-Worthy Tasks (Workshop). I attended the Group-Worthy tasks workshop which was highly interactive, applicable, and worthwhile. The facilitators took into account all our backgrounds and helped us incorporate these tasks into our classrooms. This workshop and facilitators should be a staple for AAPT as their workshops are often very helpful for practitioners.

**OTHER COMMITTEE EFFORTS** 

As an area committee, we did a few things in addition to programming:

- -We sent a letter to the AAPT Board in Summer 2022 to advocate for the addition of an interactive session format for proposals, suggest that the name change from abstract to presentations for proposals, and to express the need for more financial support for HS teachers to attend AAPT.
- -In the Spring 2022, we held a coffee hour session open to the public on how to help practitioners make a presentation at the AAPT SM22 and guide them through the abstract submitting process and financial supports available.
- -Between WM22 and SM22, we put a lot of effort on recruiting teachers local to Grand Rapids to attend AAPT. This involved coordinating with the K-12 program manager. We sent out emails to a few hundred teachers to let them about the meeting and that we are available to help answer any questions.
- In November 2022, Past-Chair Justine and current Chair Debbie ran a coffee hour on how to do Physics for 9th graders which was attended by HS teachers and college professors.

Please take a look at our newsletter to details a lot more information of what we did this past year: https://bit.ly/CPHSFall22

### SHORT RANGE GOALS ( NEXT YEAR)

Over this next year, the committee hopes to continue many efforts from the previous. This includes: (1) increasing recruitment efforts of local teachers for the Sacramento meeting, (2) providing support for K-12 teacher presenting at National Conferences in the form of information and mentoring, and (3) continuing to advocate for the needs of K-12 teachers.

### LONG RANGE GOALS (3-5 YEARS)

Over the next 3-5 years, we hope to be consistent in our presence as the representatives of the high school educators of AAPT. This will appear as: (1) continuing to propose interactive programming geared at practitioners at the National Meeting, (2) provide additional resources throughout the school year outside of the National Meetings, (3) advocating for additional financial support for K-12 educators, and (4) challenging the culture of the national meetings to be considered a resource for not only researchers but also practitioners.

### HIGHLIGHTS AND SUCCESSES

We were really excited to be able to reinvigorate the committee over the past two years and make our presence more visible. We are thankful to the Board for taking into account our recommendations for the upcoming conference formatting. We really hope to use the changes made to session formatting to encourage more practitioners to talk and share their resources.

### ADDRESSING CHALLENGES

We continue to feel that the costs of the conference pose a huge barrier to K-12 educators. The K-12 day has helped with these costs to recruit local new AAPT members, but how can we sustain them? This is where the committee and AAPT can work together to provide more resources for AAPT members throughout the year. The coffee hours have been great, but I've been spending a lot of time thinking about what else can we offer? I hope to bring this up at our upcoming committee meeting.

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND EMPOWERING AREA COMMITTEE FUNCTION

I believe that AAPT Area Committee leadership needs to have the power to be able to set up more meetings for the committee throughout the year (one in the Fall and the spring). I think it is hard to set that precedent if that is not the standard. I also think that Area Committees should have access to a listserv or some kind of easier way to communicate with those who are interested in learning more about that

group.

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND BUILDING NATIONAL CONFERENCE PROGRAMMING

Recently I attended an EdCamp in NJ which is an unconference style of meeting. Participants propose conversations to have throughout the day (on a session board). The organizers provide the spaces (rooms for conversations). This would allow AAPT to be responsive to current ideas in Physics education that have come up since the summer programming was planned. This could happen during session times scattered throughout the conference. I have a pretty strong vision of what this could look like and I would be happy to pilot something like this.

IDEAS AND RECOMMENDATIONS FOR ENGAGING MEMBERS IN LEADERSHIP ROLES, INCLUDING AREA COMMITTEES, OTHER BOARD COMMITTEES, AAPT PROGRAMS, AND/OR SERVICE ON THE AAPT BOARD.

We need to continue to create transparency in the leadership pathways. This can be done by increasing the presence of the National Nominating Committee as well as information that is more easily accessible to members. The more people that know the route to leadership, the more diverse perspectives we can get on the Board and committees.

# **Review Board Response**

Your goal of addressing the needs and barriers to high school educators is commendable. The expense associated with attending national meetings for many k-12 teachers is very prohibitive due to lack of support for the participants. One method to decrease the costs would be to make area teachers especially aware of grants available. Continuing to provide more interactive experiences at national meetings is very doable. The suggestion of sessions similar to the PTRA Make and Takes have been well attended. The discussion-based suggestion presented could be organized through the K-12 Resource Room with topics to be shared during a particular time frame posted. The purpose of virtual meetings prior to the national meeting is to promote the development of the sessions and workshops to be completed prior to the actual meeting allowing the committees to build relationships and address how that committee's work enhances the Strategic Plan of AAPT.

Kudos for the Newsletter and the use of social media and coffee hour presentations to promote the committee and the contributions made to AAPT. We encourage the committee to continue https://bit.ly/CPHSFall22.

High school and TYC memberships are declining suggestions to increasing those numbers are appreciated. Be aware that the cost of National meetings will only increase due to circumstanced beyond the association's control. Perhaps organizing small sessions or workshops at Section Representative Meetings will increase the visibility of AAPT as an organization that can offer resources and mentoring to new teachers of physics and physical science.

Area committees will play a much more significant role in program planning in the next 2 to 3 years. There is also a plan to develop training for area committee members and friends to bridge the gap to leadership and board involvement.

# COMMITTEE: COMMITTEE ON TEACHER PREPARATION

### REPORTING COMMITTEE MEMBER / POSITION

Scott Paulson
Area Committee Chair

### GOALS FOR PAST YEAR

No goals set for 2022

### COMMUNICATION AND MEETINGS OF THE COMMITTEE (PAST YEAR)

Communication happened primarily through email. During this year the committee was extremely small, consisting of the chair, co-chair, an ex-officio member, and one othe rmember, as well as several friends of the committee. Communications were limited to committee meetings (virtual and face-to-face) and emails prior to the meetings to establish meeting agendas. The communication was sufficient for planning meeting sessions, but little else was attempted, in part because of the small committee, and in part due to transitioning out of virtual meetings as the committeee struggled to maintain its vitality during the COVID era.

### WM 22 Sessions

Engage Students, Meet Standards, and Contemporary Physics being Incorporated into Classical Physics This session was moderately attended, and CTP would be willing to sponsor a similar session in the future. Get the Facts Out: Changing the Conversation Around Physics Teacher Recruitment This session was well-attended. CTP will continue to offer this session in the future.

### SM 22 SESSIONS

Implementing Get the Facts Out Resources Locally & Regionally Well attended, CTP will continue to sponsor similar sessions Strategies for Teacher Recruitment Moderate attendance, CTP wold be interested in sponsoring future sessions

### WORKSHIPS WM22 OR SM22

none

### **OTHER COMMITTEE EFFORTS**

The sponsorships of sessions was the sole activity of the committee during 2022

### **SHORT RANGE GOALS (NEXT YEAR)**

Rebuild the committee membership and discuss long range plans

### LONG RANGE GOALS (3-5 YEARS)

None were discussed during this year.

### HIGHLIGHTS AND SUCCESSES

The committee was excited to see a large turnout of friends for the SM22 meeting. We hope this results in a renewed vitality of the committee.

### **ADDRESSING CHALLENGES**

Because of the limited scope of the committee's work, CTP has nothing to report here

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND EMPOWERING AREA COMMITTEE FUNCTION

The biggest challenge I've observed has been a lack of continuity in the leadership of the committee. It seems that many times area chairs have been involved in various committees and understand the role very well, and the committees run smoothly. Because I am new to area committees, and most of my term happened while we had virtual meetings, I had little connection with the previous chairs. As a result I spent much of the year not really knowing what I should be doing. Unfortunately, this lack of understanding of the role has led to my not being equipped to mentor the vice-chair for their duties next year. While the Chairs handbook is helpful, at 50 pages, it's easy for details to be missed. It was also not obvious who I could contact with certain types of questions. Perhaps a one-pager with high-level duties and a timeline could be helpful. A (quarterly?) meeting for first-time chairs might also be valuable. Some committees have gone to a vice-chair, chair, past-chair model, which could solve some of the continuity issues.

At the summer meeting there was some discussion of trying to broaden participation in AAPT leadership (including area committees). This is to be lauded, and will defn=initely serve AAPT, but only if it is accompanied with appropriate supports/professional development for new folks being brought in.

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND BUILDING NATIONAL CONFERENCE PROGRAMMING

Broader committee participation among members would help. The committee meetings have a huge impact on what the conference programming looks like, but it seems a small group of people take advantage of this.

IDEAS AND RECOMMENDATIONS FOR ENGAGING MEMBERS IN LEADERSHIP ROLES, INCLUDING AREA COMMITTEES, OTHER BOARD COMMITTEES, AAPT PROGRAMS, AND/OR SERVICE ON THE AAPT BOARD.

# **Review Board Response**

As with many committees the lack of membership during Covid restrictions has impacted your work. It is hoped that with the return to normalcy more members will attend committee meetings be they virtual or face-to-face. AAPT can assist in posting information on a regular basis. A suggestion to increase your communication and participation would be to establish a community's page for your committee and a friends of committee page. Mike Hall can assist. Once the pages have been established biweekly posting will increase traffic. With the decrease in teachers of physics and physical science this committee could play a valuable role in mentoring and encouraging younger physics majors in their careers.

To address the issue with leadership and continuity a chairs and vice chairs orientation is in development. The suggestion of a 1 pager with high-level duties and a timeline is an excellent suggestion as well as a quarterly meeting for chairs and vice chairs of all committees. AAPT is a volunteer organization and more participation of area committees in program planning and leadership training will definitely serve AAPT, but you are correct that more supports/professional development is required to bring this concept to fruition.

# **COMMITTEE:** Two Year Colleges

# REPORTING COMMITTEE MEMBER (TBD)

### LONG RANGE: GOALS:

- 1.1 Long Range: One goal of the Committee on Physics for Two Year Colleges (TYC) is to continue to support the goals, the mission and vision of AAPT as an organization. Through carefully selected topics TYC will continue to serve our organization better and find ways to engage the physics community.
- 1.2 Long Range: OPTYCs: Work in conjunction with OPTYCs to identify the needs of the TYC community at large, and address their issues and topics of interest via virtual meetings, disseminating information obtained by OPTYCs to the general TYC community, inviting talks and workshops of interest to the TYC community during our AAPT Summer and Winter meetings.
- 1.3 Long Range: To support the adjunct faculty. With increasing numbers of adjunct faculty in the profession we need to find ways to connect with them in order to avoid isolation and feelings of invisibility. Getting them involved in AAPT recognizes their value to the institutions they serve, gives them the sense of belonging that AAPT provides and delivers opportunities for skill development. Investing in adjunct faculty makes the organization more inclusive and stronger.
- 1.4 Long Range: Continue to host TYC Day at AAPT national meetings. Prioritize organizing or supporting sessions or workshops whose topics explicitly align with the mission and values of TYC community.
- 1.5 Long Range: Encourage current members to renew their membership in order to keep the organization healthy. Increasing contact with current and prospective members about the benefits of AAPT membership.

# COMMITTEE MEETINGS/COMMUNICATIONS (Type:COMBINATION) ACTIVIES AND ACCOMPLISHMENTS:

### 2. Current Year:

Continue with virtual meetings to help plan for in-person meetings during conferences. This approach would leave more time at face-to-face meetings to address more strategic initiatives.

- 2.1 OPTYCs Grant The Organization for Physics at Two-Year Colleges was awarded an NSF grant 1-July-2022. This is a four-year project to create a sustainable community of practice for physics-teaching at TYCs. AAPT is the fiduciary agent for this \$3M project. The CPTYC was instrumental in creating the work group of volunteers during the summer of 2021 to brainstorm initiatives that were proposed in this grant project. Note that OPTYCs is not an organization of CPTYC.
- 2.2 Physics Education Research Interest Group: Journal Club. (OPTYCs) The journal club promotes great conversations and triggers ideas for future

discussions and events. Website: https://sites.google.com/aapt.org/tycper-interestgroup/home

- September 30, 2022 : Demographics of PER (Kanim & Cid, 2020)
- October 28, 2022: Increased learning in a college physics course with timely use of short multimedia summaries (Dunleavy, et. al., 2022)
- December 2, 2022: Group roles in unstructured labs show inequitable gender divide (Katherine N. Quinn, Michelle M. Kelley, Kathryn L. McGill, Emily M. Smith, Zachary Whipps, and N.?G. Holmes, 2020) <a href="https://journals.aps.org/prper/abstract/10.1103/PhysRevPhysEducRes.16.010129">https://journals.aps.org/prper/abstract/10.1103/PhysRevPhysEducRes.16.010129</a>
- 2.3 Professional Development workshops: (OPTYCs Events)

- Nov 12, 2022- PICUP Collaboration: Using Spreadsheets to Integrate Computation into Physics Courses for Two-Year Colleges (Virtual-3hrs.)
- January 15, 2023- Winter AAPT Meeting Workshop: In-person on advanced WebVPython
- February 11, 2023- PhET Collaboration: Using PhET Simulations in Your

Physics Courses at TYCs (Virtual – 3 hrs.)

- March 11, 2023 TEAM-UP Collaboration (Virtual 3 hrs)
- July 15, 2023 Tandem Meeting with the AAPT Summer Meeting in

Sacramento, CA. It is an all-day meeting

· July 16, 2023 – TEAM-UP Workshop (F2F – 4hrs.)

# 2.4 Sponsored Activities at AAPT SM 2022:

- · Workshop: Introduction to WebVPython
- · Workshop: TEAM-UP Workshop (jointly sponsored with OPTYCs)
- · Session: Being a Student-Ready Physics Class
- Session: Diversifying through Connections at TYCs
- · Panel/Topical Discussion: Modern Eddington Experiment 2024

2.5 Activities/Accomplishments in 2022 Committee Meetings/Communications. The committee meetings at the national meeting Summer 2022 at Grand Rapids was well attended. There were 27 attendees in person and 7 online. For the first time during national meeting, we set Zoom link for members to join the meeting remotely.

# 2.6 Zoom virtual meetings on various topics

- February 01, 2022 TYC: DEI Training
- February 11, 2022 TYC: About OPTYCs
- April 15, 2022 TYC: A view of the future of TYC
- June 24, 2022 TYC: Workshop ideas for TYC SM 22
- July 12, 2022 TYC: Committee meeting in person, Grand Rapids
- September 9, 2022 TYC: Moving Forward
- September 23,2022 TYC: How to help struggling students
- October 21, 2022 TYC: Teaching unprepared students
- · November 4, 2022 TYC: All about labs
- November 18, 2022 TYC: How to create more engaging syllabus
- Future: Tentatively planning about every 2 weeks. Other topics being considered: more on underprepared students, labs, teaching philosophy.

### Other Activities

# 2.7 Other activities:

- · Conversation with nominating committee. TYC will work with the nominating committee to increase transparency and selection process in order to better transition the leadership process. TYC will work with the nominating committee to elect faculty that is willing to actively participate in the committee.
- Continue to cooperate with the Undergraduate Education Committee on courses and curricula and on matters related to articulation for students transferring between institutions. New Ideas and Highlights (Specifically, what are some highlights from your committee's work that we can share publicly at AAPT.org? (list 2-4 highlights) ):

- 3. Next Year: OPTYCs Programming
- 3.1 New Faculty Development Series (OPTYCs program) Accepting applicationsFor new Two-Year College faculty in their first six years of TYC teaching.Cohort 1 will run March 2023 July 2024
- 3.2 PhET Collaboration: Feb 11, 2023 virtual workshop on effective strategies to using PhETs Spring 2023 four Journal Club discussion
- 3.3. TYC Tandem Conference: July 15, 2023 (in association with AAPT National Summer Meeting): currently recruiting workshops and poster presentations
- · Confirmed workshop from the NASA-HEAT project (infusing astronomy data into regular physics classes as a teaching tool)
- · Confirmed workshops on alternative grading strategies (mastery-based)
- 4. New Ideas: Create a Committee on the Adjunct Faculty Resources

This committee could provide a forum for colleges to discuss ways to better recruit, train, mentor, and supervise adjunct faculty, and to provide an opportunity for discussion of issues that are of particular interest to adjunct faculty.

### RECOMMENDATIONS

### Recommendations to the board

- 5.1 TYC breakfast: The TYC breakfast during SM2022 was very well attended. We recommend breakfast reservations close as late as possible in order to guarantee maximum attendance. We recommend buffet style breakfast with coffee and pastries in order to support mingling and flexibility in choice of breakfast. The TYC breakfast is a place for informal interactions. We would also like to consider offering this breakfast at a discounted rate to those individuals who sign up for the TYC Day to increase the likelihood of their attending to meet and network with other TYC members. We propose changing the breakfast time from 7AM to 7:30AM and extending it until 9AM in order to allow sufficient time for eating, networking and transitions to the first session. Feedback from the summer meeting 2022 suggested that the time was insufficient for talking and discussing issues of importance to us.
- 5.2 TYC day: To reinstate TYC day, where TYC faculty could attend a single day of the national meeting at a much reduced price.
- 5.3 Membership for adjunct faculty: To establish reduced membership for adjunct faculty. This is in keeping with National AAPT goals on increasing the membership in AAPT.
- 5.4. Keynote speakers: We recommend that AAPT invest in securing keynote presenters that have a physics connection but also excellent storytelling skills. We feel that this could contribute to higher attendance overall.

### **Board Comments**

The Committee on Two Year Colleges has been extremely organized for 2022. In conjunction with the OPTYCs grant members of the TYC have offered and are offering multiple opportunities for members to engage outside of national meetings with Zoom calls and Professional development opportunities. Going forward, suggestions of the committee include continuing a TYC Day at national meetings, expanding the TYC breakfast to encourage interactions between attendees and to create a Committee on Adjunct Faculty resources. This committee would focus on methods of recruiting, mentoring and retaining adjunct faculty. Establishment of an Adjunct Faculty Membership to AAPT would encourage membership. The final recommendation is to have plenary speakers who are not only outstanding in the field of physics or physics education but also have excellent storytelling skills. Outstanding work during very trying times

# COMMITTEE: SPACE SCIENCE AND ASTRONOMY--2022

### **GOALS**

a. *Current Year*: Make available at national meetings more interactive hands-on experiences, to complement passive sessions:

SM22 was our first in-person meeting post-pandemic. We had two sessions that addressed this goal: one held in the Digitalis Planetarium and the Safe Solar Observing Share-A-Thon. Variations of both of these will be conducted again in WM23 and SM23, respectively.

b. *Current Year*: Continue to encourage use of the COMMUNITIES platform for the Friends of CSSA group:

We have been posting information (e.g., AstroNotes calls, meeting schedule announcements, polls for future meeting times) to the Friends of CSSA group within COMMUNITIES, however, we know that we are still missing many people. We will continue to highlight and provide instruction on how to join at each virtual and in-person meeting that we have going forward.

We have also announced that we will not continue to email people directly from the old Listserv spreadsheet and that COMMUNITIES will be the information site going forward.

CSSA Chair Janelle Bailey and Vice Chair Darsa Donelan have attempted to "share the load" in terms of initial announcement postings and boosting, to demonstrate use by multiple people.

c. Long Range: Diversifying our invited speakers:

As we support organizers in development of sessions, we are trying to encourage people to think more broadly about their invited speakers. While we have always suggested "local talent" due to the lack of travel support for speakers, we are now also focusing on helping identify more potential speakers from a variety of historically underrepresented groups and intersections. Efforts will continue over the long term.

d. *Long Range*: Encourage nominations for AAPT awards, with particular attention to women and scholars of color:

CSSA Chair Janelle Bailey and Vice Chair Darsa Donelan successfully made a nomination for the JD Jackson award, which will be presented to Kim Coble (San Francisco State U) at WM23. We were deliberate about considering possible nominees as well as supporting letter writers, taking into account the statistics about historically underrepresented individuals not being nominated by others or nominating themselves and more letters being written by women than men. We will continue to highlight these issues when opportunities arise to discuss nominations.

Darsa is an award winner for WM22, although we did not have anything to do with that nomination process. \*grin\*

# **ACTIVITIES/ACCOMPLISHMENTS IN 2022**

a. Committee Meetings/Communications (Type: Call):

WM22 - virtual business meeting 1/4/22

b. Committee Meetings/Communications (Type: Call):

SM22 - virtual business meeting 6/24/22

c. Committee Meetings/Communications (Type: Inperson):

SM22 - in person business meeting 7/12/22

d. Committee Meetings/Communications (Type: Email):

Various COMMUNITIES and email posts throughout the year

e. Committee Meetings/Communications (Type: Call):

Chair and Vice Chair virtual meetings on average every two weeks--during this time we would focus on completing tasks for national meetings, follow up correspondence with AAPT staff or volunteers, and planning for future efforts

f. Sessions/Workshops:

WM22 (virtual)

- 1 workshop (NASA HEAT) held shortly after WM22
- 4 proposed workshops cancelled due to virtual conference setting
- 5 sessions (Frontiers I & II; Modern Eddington Experiment; Astronomy papers; Astronomy posters)
- 3 proposed sessions cancelled due to virtual conference setting
- 1 plenary of interest to CSSA community (Greenhouse)
- g. Sessions/Workshops:

SM22 (in-person, woohoo!)

- 4 workshops
- 7 sessions, including invited, inv/cont, cont, posters
- 2 plenaries of interest to CSSA community (Galindo, Duncan)

Lower attendance at most (conference attendance overall was down) but positive experiences as noted by organizers

### RECOMMENDATIONS

a. AAPT recently supported a letter from the AAS encouraging NASA to change the name of the James Webb Space Telescope (JWST), given Webb's maintenance of harmful policies toward members of the LGBTQIA+ community. We encourage the Board to continue to support this and similar efforts and to proactively facilitate safe spaces for LGBTQIA+ AAPT members.

### **BOARD COMMENTS**

The CSSA has gone above and beyond to ensure that members and friends of the committee had multiple opportunities to attend meetings throughout the 2022 either virtually and in person. Their use of Communities is to be commended as many committees are struggling to communicate with the lack of the Listserv. The biweekly correspondence between chair and vice chair have helped the operations of the committee to be successful. Although their workshops and 3 sessions for WM 22 were cancelled due to the virtual meeting. The summer meeting was very successful. It is noted that the CSSA has embraced the work of the DEI task force with encouraging diverse plenary speakers and awardees. They will continue to encourage more participation in the nominations process for women and underrepresented groups. Kudos to this area committee for striving to make AAPT more accessible to all instructors of physics and physical science.

# COMMITTEE: CONTEMPORARY PHYSICS (FORMERLY MODERN PHYSICS)

REPORTING COMMITTEE MEMBER / POSITION James O. Rantschler, Committee Co-Chair

### GOALS FOR PAST YEAR

### INCREASE SERVICE TO AAPT AND PHYSICS EDUCATORS:

Members of the Committee on Contemporary Physics are interesting in hosting pre-meeting workships for high school students before the WM23. In particular, members who are also engaged with the QUARKNET are hoping to utilize funds that the committee was awarded laate yer but has not used to support this goal. NEXT YEAR: DEVELOP INTERDISCIPLINARY CONNECTIONS:

The Committee on Contemporary Physics is uniqu in that it is one of the few content-focused area committees at AAPT. The Committee seeks to strengthen relationships with educators who focus on BIOPHYSICS, SPACE SCIENCE, and DATA SCIENCE. The (CCP) has sponsored/co-sponsored sessions related to data science SCIENCE (WM23, SM23) AND BIOPHYSICS (SM23).

### COMMUNICATION AND MEETINGS OF THE COMMITTEE (PAST YEAR)

MOST COMMUNICATION HAS MIGRATED TO THE COMMUNITIES PLATFORM. MEETING AGENDAS AND NOTES ARE DISTRIBUTED THERE. IN ADDITION, LINKS ARE SENT OUT PRIOR TO COMMITTEE MEETINGS FOR SESSION PROPOSALS.

IN ADDITION TO THE SM23 COMMITTEE MEETING, THE COMMITTEE MET IN APRIL 2022 TO DISCUSS POTENTIAL OUTREACH OPPORTUNITIES IN THE FUTURE. ONE CHALLENGE THE COMMITTEE HAS FACED IS NOT RECEIVING RESPONSES FROM AAPT LEADERSHIP ABOUT THE FUNDING THAT WAS ORIGINALLY AWARDED FOR WM22.

BETWEEN THE VIRTUAL AND IN-PERSON MEETING OPPORTUNITIES, A TOTAL OF 12 MEMBERS AND FRIENDS ATTEND THE SM22 COMMITTEE MEETINGS. THE COMMITTEE HAS BEEN CHALLENGED TO RECRUIT NEW MEMBERS WITH LIMITED VISIBILITY DURING THE PANDEMIC.

### WM 22 SESSIONS / SM 22 SESSIONS

FOR SM22, OUR PROPOSED SESSIONS LIST WAS LOST DUE TO A TECHNICAL ERROR. DUE TO THIS ISSUE, THE ONLY SESSION WE DIRECTLY SPONSORED WAS THE ONE TITLED "MICHIGAN STATE UNIVERSITY PHYSICS." THE ATTENDANCE FOR THIS SESSION WAS NOT HIGH (LESS THAN 10) - POTENTIALLY DUE TO THE VAGUENESS OF THE TITLE. SESSIONS FOR WM23 AND SM23 MORE CLEARLY INDICATE WHAT CONTENT WILL BE DISCUSSED AND WHY IT MAY BE OF INTEREST TO AAPT MEMBERS.

HAT HAVING BEEN SAID, THE SESSION "21ST CENTURY PHYSICS IN THE CLASSROOM" HAS REGULARLY BEEN OFFERED BY THE COMMITTEE ON CONTEMPORARY PHYSICS. THIS SESSION WAS OFFERED IN SM22, HOWEVER IT WAS SPONSORED BY ANOTHER COMMITTEE. THE SESSION HAD HIGH ATTENDANCE, AND IN FACT WAS SPREAD OVER MULTIPLE SESSION PERIODS DUE TO THE

NUMBER OF RELEVENT SUBMISSIONS.

WORKSHIPS WM22 OR SM22

**OTHER COMMITTEE EFFORTS** 

SHORT RANGE GOALS ( NEXT YEAR)

LONG RANGE GOALS (3-5 YEARS)

### HIGHLIGHTS AND SUCCESSES

THE MOST SIGNIFICANT ONGOING ADDITIONAL EFFORT FROM THIS COMMITTEE HAS BEEN TO ESTABLISH A MEANS TO ENGAGE WITH THE LOCAL COMMUNITY AT THE WINTER (AND SUMMER) MEETINGS. WE HAD INTENDED TO SPEND TIME IN LOCAL SCHOOLS BEFORE WM22, HOWEVER WE HAD TO CANCEL THOSE PLANS WHEN THE MEETING WAS MOVED VIRTUAL.

WE ARE NOW TRYING TO CONNECT TO LOCAL SCHOOLS IN PORTLAND SO THAT MEMBERS OF QUARKNET CAN HOLD ONE-DAY WORKSHOPS FOR STUDENTS IN THE AREA. WE HAVE REACHED OUT TO SEES AND PROGRAMS BUT HAVE NOT HEARD BACK ABOUT POSSIBLY COMBINING EFFORTS OR COLLABORATING.

WE HAVE ALSO REACHED OUT ABOUT THE MINIGRANT WE WERE AWARDED FOR THE WM22 OUTREACH, BUT AGAIN, HAVE NOT HEARD BACK FROM AAPT LEADERSHIP.

#### ADDRESSING CHALLENGES

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND EMPOWERING AREA COMMITTEE FUNCTION

CCP recommends that the AC chairs serve two year terms and there there be any sort of onboarding process for AC Chairs. The process currently relies heavily on Institutional Memory, and the one year turn around for the vice-chair/chair positions does not give sufficient time to learn the role and actually engage in a meaningful way.

It is frustrating to repeatedly receive no direction or response to inquiries. While I understand that AAPT is a largely volunteer ornazation, it seems that it is not too much to askf or there to clearly be someone for area chairs to go with questions. It has been hard to engage with the organization and the committee this semester because of the lack of communication.

### IDEAS AND RECOMMENDATIONS FOR IMPROVING AND BUILDING NATIONAL CONFERENCE PROGRAMMING

We have continued to find ways to bring contemporary physics research to the community of physics educators through sessions and workshops.

We focus not only on topics that are of recent interest, but also utilize the location we find ourselves in for the meetings. We hosted a Michigan State University Physics session in Michigan and will be hosting a session on Radiation Effects and Accelerators at SM23.

IDEAS AND RECOMMENDATIONS FOR ENGAGING MEMBERS IN LEADERSHIP ROLES, INCLUDING AREA COMMITTEES, OTHER BOARD COMMITTEES, AAPT PROGRAMS, AND/OR SERVICE ON THE AAPT BOARD.

# **Review Board Response**

The Modern Physics Committee, rnamed as the Committee on Contemporary Physics (CCP) has several concerns that are relevant regarding committee structre and communications with the leadership of the board and AAPT staff. It is suggested that there be standardized onboarding traning for the committees and that the chair and perhaps the vice chair be a two year committeent. As many other committees suggest, once a chair figures out what is going on, it is time to pass the responsibility to the next chair, with institutaional memore as the only real guide. The CCP session on "Physics for the 21st Centuray is always well-attended and the focus of working with area schools and QUARKNET to provide pre-meeting workshops for students is commendable.

The review board acknowledges committee's frustration at the vagueness of the program descriptions for the session that may have led to a lower attendance at the session for SM23 (Grand Rapids).

The committees' focus on relevant physics topics and utilization of strengths near the meetin area provide enriching sessions and workshops. We look forward to the SM23 Radiation Effects and Accelerators.