

Fall , 2022

Issue 51



Long Island Physics Teachers Association Newsletter



Important Dates

Fall Conference	Sat Nov 5
Physics Olympics	Thurs Nov 16
Spring Conference	Sat Apr 22
AP C Exam	Tues May 9
AP 1 Exam	Thurs May 11
AP 2 Exam	Fri May 12
Regents Physics Exam	Thurs Jun 22
End of year BBQ	Wed Jun 28

Check the
LIPTA website
www.lipta.org
for any updated
information.

President's Message

We're off to a great start! From where I stand, the year looks so much better than last year or the year before. Maybe you are experiencing the same positive changes.

It's great to see everybody in class, and the expectation is that we will all be in class all year. That, by itself, makes teaching so much better than the alternative. In person, the students have an easier time focusing and staying on task, and they have richer interactions with their peers. As a teacher, it is so much easier to make connections with my students and also to look out for their well-being. Seat time is important, and the world around us has realized that in-person classes work better than virtual learning. Just a few years ago there were rumors that cost-cutting measures might lead us to scenarios where classes are taught by having huge classes watch a master teacher on a big screen. The past two years have shown us that that mode doesn't work well, so it will be a while before anybody brings up that scenario again. With luck we'll all be retired by that time.

Mastery now means mastery, or at least a lot closer than it has for the past couple of years. We are easing back into giving out grades that reflect a student's mastery of material. For the past two years, and for good reason, many of us teachers have been very gentle with our students. Even though their learning was far below previous years, they still earned the grades at or above those of their predecessors. It is well understood that students have lost a lot over the past two years, in terms of knowledge, study skills, and emotional strength. This year they are being pushed to learn more, and the grades, while still gentle, are closer to representing their mastery of material.

And we've learned. Several years ago, there was no mention of emotional health, and students' emotional well-being wasn't really something to consider. For the past two years, and really for a bit longer than that, we focused heavily on students' emotional well-being. I think that was a good step, and my students felt much better knowing that they were being heard. But I think we may have gone too far, and by not pushing the students a little past their comfort zones, they didn't grow as much as they could have. We seem to be getting back to a good place, where we recognize and acknowledge our students' emotional needs, but where we also push them to grow. That feels like a good balance to me. Maybe, while

Continued on next page

LIPTA Executive Board

President

Gillian Winters, PhD
Smithtown H.S. East
winters@lipta.org

Vice President

Bill Leacock
Retired.
leacock@lipta.org

Recording Secretary

William B. Lynch
Retired
lynch@lipta.org

Treasurer

Section Representative

Tania Entwistle
Retired
entwistle@lipta.org

Newsletter Editor

Terese Keogh
Retired
keogh@lipta.org

Physics Olympics

Justin King
Commack HS
king@lipta.org

At large

Harry Stuckey
Retired
stuckey@lipta.org

At large

Diana Nigro
Mepham HS
nigro@lipta.org

At large

Richard Slesinski
Syosset HS
slesinski@lipta.org

Continued from previous page

we're at it, we have learned to give ourselves a little slack too, so that our own needs are met also.

Here's hoping that this is a great year for everybody.

Coming Soon A New LIPTA Website



For many years, Bill Lynch has spent countless hours managing and updating www.lipta.org. The LIPTA website has allowed us to register for conferences, RSVP for the barbecue, and see photos from the Physics Olympics and other events.

Recently our web hosting service informed us they would be discontinuing support for the website management system we had been using, and it was decided this was a good opportunity to give the website a complete overhaul.

Our top priority has been to retain all the functionality of the original website, including Conference and Physics Olympics registration. We also want to make it easier to find information and photos from previous events. Our long term goal is to have private user profiles for each LIPTA member that will indicate membership expiration dates, past and future conference registration status, and hopefully more!

We plan to launch the new LIPTA website in time for Physics Olympics registration, but we'll have a sneak preview for those LIPTA members attending the Fall Conference on November 5th.

Do you have any comments, information, or tips to share for future newsletters? Send it via email to:
keogh@lipta.org

LIPTA — Forty Years Old And Still Going Strong

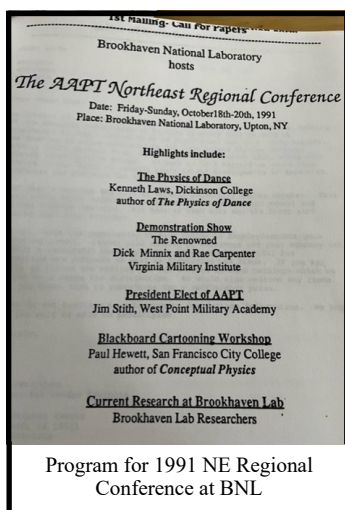
by Tania Entwistle

On an afternoon in July 1981, five local physics teachers, with too much time on their hands, came together at the home of Susan Agruso. Susan was a devoted, young teacher at East Islip High School with Bill Lynch. Bill found his calling as a physics teacher after working in engineering. Carol Escobar, who was a teacher at Bellport High School, also came to teaching later in life. Marty Schnittman, a veteran teacher at Huntington High School, provided the expertise so needed to form Long Island Physics Teachers Association and served as president. And I, a new teacher who would soon begin teaching at John Glenn High School, completed the founding group. Physics teachers are often alone in a school and our group felt a strong need to provide a way that new teachers could access valuable curriculum sources while veteran teachers could share their classroom experiences and also obtain support for their classroom needs.

And, so, our intrepid crew began providing a long list of activities for local physics teachers and students beginning with the first Physics Olympics in 1982, hosted by Carole at Bellport High School. It was such a success that we needed more space and Dr. Cliff Swartz, editor of *The Physics Teacher* and innovative professor of Physics at SUNY Stony Brook, hosted us for the next year when William Floyd High School took the top prize. We have experienced all kinds of challenges in keeping this competition going over the years- moving from SUNY Stony Brook to Farmingdale State College to Smithtown High School last year. In the early years, there was a spring and bowling ball event that, thankfully, did not maim anyone. Even Covid didn't slow us down for long! The Olympics has always been marked by a friendly spirit of competition and fun.

In 1984, Cliff Swartz (and later professor Bob McCarthy) came to our aid again as SUNY and LIPTA collaborated on offering the Challenge Exam. Students from across Long Island competed to be the top performers on exams, which were offered for both Regents and AP levels. This contest continued until 1998 when we were unable to coordinate this popular event any longer.

In 1990 Physics Day at Adventureland provided an opportunity for Long Island physics students to apply their new skills in a fun setting, without making the big trip to Great Adventure. Carole Escobar and Sue Agruso developed a workbook to help teachers make this a true learning experience. Sue would leave teaching to pursue her dream to become an astronaut. By this time Rich Yngstrom from Patchogue-Medford High School had joined our group and shepherded Physics Day until 2017! Ed McDaniels from Amityville High School also brought his practicality and a dry sense of humor to our group. Unfortunately, our president, Marty Schnittman passed away, but Carole Escobar was there to take on the job, as Jane Schoch from Port Jefferson High School and Ed Pascuzzi from Glen Cove High School came onto our board. Ed Pascuzzi took on the job of publishing a newsletter, which he managed with an iron pen.



Jane and Carole managed to organize our first Northeast Regional Conference at Brookhaven National Lab (BNL) in 1991. We became part of the northeast contingent of AAPT and teachers from all over this area attended. This was our first major conference, although we offered smaller gatherings hosted by local high schools and BNL. In 1992, our big conference was at Adelphi University. Unfortunately, Carole Escobar passed away in 1994 and Jane Schoch took on the job of LIPTA President and some of us worried about her fate with the death of the two former presidents while in office!

Fortunately, Bill Leacock of Mepham High School came onto the board as our go-to organizer for conferences. Along with our old hand computer expert, Bill Lynch, and myself, we put together the 1996 Northeast Regional conference which was a three-day event held at BNL that drew 250 participants from all over the country. The multitalented Paul Hewitt and Lawrence Krauss, who promoted

Continued on next page

Continued from previous page

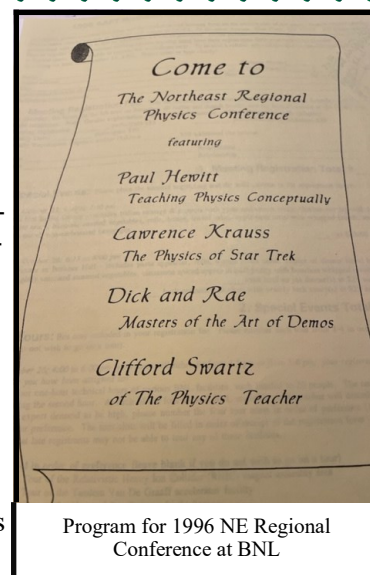
his book, *The Physics of Star Trek*, were part of the wonderful lineup. After this conference we settled into our regular Fall and Spring conferences. We tried innovative ideas like a social mixer for members and starting in 2010, Bill Leacock and Ed McDaniels opened their homes and lit their grills to have our summer barbecue. We added the AP Exam analysis in 1996, which continued this year at Deer Park BOCES. It was always a challenge putting together those solutions so soon after the exam, but computers have made things easier and easier!

In 1997, Jane Schoch left the presidency, alive, and Ed McDaniels became the president, while Matt Schildknecht of George W. Hewlett High School came on for two years. The next year we lost Ed Pascuzzi, our newsletter editor, but Roberta Amian of Huntington High School, served for a few years. Things were pretty stable for awhile. In 2005 we got our newsletter back! Terese Keogh of Manhasset High School joined the board and has faithfully produced the latest news for LIPTA ever since. Dr.

Gillian Winters also came on bringing her years of experience in industry and an enthusiasm to get involved in groups like Quarknet, a group devoted to showcasing the latest in physics research. Harry Stuckey of Garden City High School also joined us. Harry's wide physics teaching experience and involvement in Quarknet were great additions to our group's knowledge. His willingness to fill in as photographer and on-call facilitator have been invaluable. For a little variety, we enjoyed an evening at BNL in 2008 when Susan Frontczak performed a compelling reenactment of Marie Curie's life.

Starting in 2015, Lauren Demery from Valley Stream North High School came on for four years and Rich Slesinski of Syosset High School joined us until 2018. He's back with us again! Justin King of Commack High School came in 2019 and had the awesome courage to run our Physics Olympics this year! Good going, Justin! A shout out to Matt Cooper who was a great help for last year and to our newest and can-do member, Diana Nigro from Mepham High School, who hasn't met a challenge that she isn't willing to take on.

Last year, Ed McDaniels, our long serving (and suffering?) president retired to Florida with his lovely wife. We will miss his pithy observations and phenomenal culinary skills. Gillian Winters has enthusiastically taken up his job and is bursting with new ideas to bring LIPTA to post-pandemic success. Finally, I keep coming and going and cooking. The diversity in our group is inspiring. Bill Lynch has been serving since LIPTA began! Many of us are retired and still continue to serve our physics teacher community. Our newest members bring fresh ideas and enthusiasm. We welcome all to our productive and enthusiastic club, still going strong after forty years!



Do You Need Professional-hour credits?

- ⇒ Attend the Fall and Spring Conferences (3 credit hours for each conference)
- ⇒ Attend the AP Physics Exam Analysis (2 credit hours)

CTLE Certificates are available.

Make Teaching Great Again!

by Diana Nigro

According to *30 Incredible Teacher Statistics, 2022*, about 60% of teachers are happy with their career and 44% of teachers quit in the first 5 years. Compare that to *Surprising Job Satisfaction Statistics, 2022*, that 65% of employees are satisfied by their jobs. And in *17 Remarkable Career Changes Statistics to Know, 2022*, only 29% of employees decide to change their careers at some point.

Teaching is a rewarding career. After all, teachers interact with thousands of students, and many people express that a teacher in their life was a positive role model and/or inspired them at some point in their lives. Furthermore, as a teacher, one can choose a specialty area, have some control over what one does in the classroom and a big benefit is having time off for holidays and during the summer.

There are a few factors that can make it difficult to be a teacher. Academic standards can be frustrating, often requiring teachers to teach too much content in one school year which may handicap in-depth content investigation. Politics, mental health, shootings, the pandemic and the overwhelming surge of technology are all aspects that play a major role in the teaching profession, and can prove to be too much to handle in the 40 minutes one gets to interact with a given student in a day.

So, how can teaching be great again?

The Role of a Teacher

There will always be academic standards, policies and social challenges. There will always be change and conflict. The role of a teacher is the role of a leader. Students are watching. Teachers have a great opportunity to teach resilience, grit, confidence and kindness by how every challenge is met. Students can feel when their teacher seems unaffected by what goes on in the outside world and how time is taken to make the classroom become a safe place to be. Here's what Erica Wagner, an English teacher at Mepham High School, had to say about what works best when helping students learn: "Being an educator for the past twenty years, I have found that compassion, respect, and patience are important when helping students thrive in the classroom. If a student feels comfortable in his/her learning environment, he/she is more apt to ask questions, contribute to a class discussion, and attend extra help when needed. Creating healthy teacher-student relationships extends specifically to my content area. When reading a piece of literature, we speak about human topics, which allows students to process their own feelings when dealing with issues in their own lives. I feel very lucky to have been afforded these opportunities to learn more about students, which has allowed me to make meaningful connections with them."

It Takes a Village

There are things out of a teacher's control. The administrative team and the atmosphere of a school can make a big difference in teachers' abilities to do their job and keep their sanity. I am fortunate enough to work at a place where collaboration is palpable, and yet, I seem to lack the time to tap into the treasures that are around me. Here's what Gillian Winters, Physics teacher at Smithtown High School, had to say about possible changes in the school system: "I would schedule regular periods for teachers to collaborate. Instead of having a required "duty" during the day, teachers would have a "collaboration" duty. If it was scheduled appropriately, teachers would have the opportunity to work collaboratively with others in their departments, could observe others in their department, and could even collaborate and observe across departments during their collaboration period. Teachers don't currently have enough time or incentive to do that during the day. To free up teachers' time I would hire non-teaching staff to fill duties during the day, and replace a teacher's "duty" with a "collaboration" period."

Continued on next page

Continued from previous page

Teaching may not be the easiest or the most rewarding job out there, but what an opportunity teachers have to be the change this world needs.

References

30 Incredible Teacher Statistics, 2022, <https://www.zippia.com/advice/teacher-statistics/>

11 Surprising Job Satisfaction Statistics, 2022, <https://www.apollotechnical.com/job-satisfaction-statistics/#:~:text=In%20the%20U.S.%2C%2065%25%20of,come%20to%20the%20right%20place.>

17 Remarkable Career Changes Statistics to Know, 2022, <https://www.apollotechnical.com/career-change-statistics/>

LIPTA Fall Conference

Saturday, Nov 5

8:30 — Noon

Stony Brook University

Physics Building Room P-118

Teaching Energy Using Jigsaw Cooperative Learning
Justin King and Richard Gears, PhD

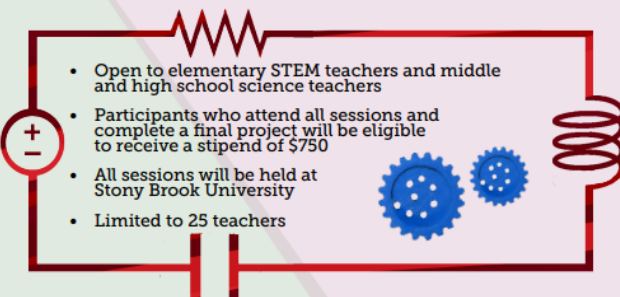
The Physics of Sports
Prof. Chang Kee Jung

3 CTLE credits available

Full details and registration at www.lipta.org

ENGINEERING IN THE SCIENCE CLASSROOM

PROFESSIONAL DEVELOPMENT PROGRAM




- Open to elementary STEM teachers and middle and high school science teachers
- Participants who attend all sessions and complete a final project will be eligible to receive a stipend of \$750
- All sessions will be held at Stony Brook University
- Limited to 25 teachers


NOVEMBER 8th, 2022 @ 8:30 AM - 11:30 AM	JANUARY 17th, 2023 @ 4:30 PM - 6:30 PM
MARCH 7th, 2023 @ 4:30 PM - 6:30 PM	MAY 23rd, 2023 @ 4:30 PM - 6:30 PM

Participants will learn how to incorporate engineering in their classrooms as they begin to transition to NYSSLS. Hands-on engineering activities will be included.

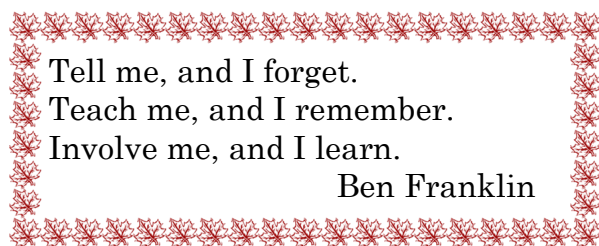
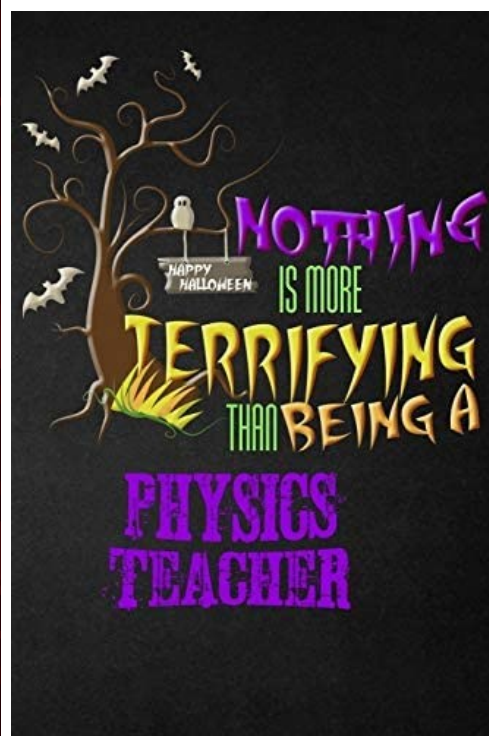
To register, please use the link:
<https://tinyurl.com/engPD2223>



Stony Brook University



For further information, email Kathleen.dinota@stonybrook.edu.





AAPT 2023
PHYSICS EDUCATION®

WINTER MEETING
 January 14 - 17 Portland, OR

2023 AAPT Winter Meeting

The 2023 AAPT Winter Meeting will be held January 14-17 at the Hilton Portland Downtown. Mark your calendar and get ready to see old colleagues and connect with your peers who share your commitment to excellence in physics education.

Find out more and become a part of
WM2023 on: Facebook | Twitter