## Physics Outreach

SMAP

March SMAP included Professor Matt Lister, who presented a lesson on Radio Astronomy. Eight service learning and volunteer students assisted.

Service Learning

Service learning student, Bilal Khalid, began work in the planning and design of lessons on force and motion for the upcoming middle school teacher workshop.

e-Learning resources

Polled teachers and contributed resources to the College of Science Outreach website to provide materials for electronic instruction

Science Express

Completed the re-write of Notebook Circuits in preparation of creating a video version, to be made available to teachers want to have students collect and analyze data at home.

PRIME Lab

Worked with PRIME Lab administrators to create an virtual video tour of the lab, and accompanying instructional materials.

## Earth, Atmospheric, and Planetary Sciences Outreach

* + *Goal 1:* ***Support for K-12 science and mathematics educators***
    - Teacher Professional development
      * Working with other coordinators to design a number of teacher professional developments that we will hold this summer.
      * Met with the University Residences team to discuss and formalize agreements for the Summer 2020 teacher professional development programs that will be offered on campus.
    - Getting information out
      * Web **calendar of events** for EAPS K-12 outreach
        + <http://www.eaps.purdue.edu/outreach/Outreach_News.html>
      * We have a **Facebook** for EAPS Outreach
        + [https://www.facebook.com/EAPS.out](https://www.facebook.com/EAPS.out/)
      * Purdue **Science K-12 Outreach newsletter** goes out to 500+ subscribers.
        + <https://us4.campaign-archive.com/home/?u=1bbd2c49c28247b75608f1d3d&id=87beefd504>
      * Twitter @PurdueSOS
        + <https://twitter.com/PurdueSOS>
    - Teacher Resources:
      * **Superheroes of Science podcast!** Podcast for students and educators interviewing scientists and science education specialists.
        + Released season 1 podcasts on YouTube from Darryl Granger, Dan Cziczo, Lisa Welp, Robin Tanamachi, Chris Andronicos, and Dan Chavas.
        + Released new podcasts from Michelle Thompson, Andy Freed, Birgit Kaufmann, Jani Sparks, and Mike Reppert.
        + Created student worksheets for Superheroes of Science episodes that teachers can assign.
      * Loaned a NPK soil testing kit to West Lafayette High School.
      * Created online VR tour of the EAPS outdoor Rock display [**https://poly.google.com/view/3RKVpGUU-ay**](https://poly.google.com/view/3RKVpGUU-ay)
      * We have a **EAPS K-12 Outreach Pinterest** page to help teachers find resources in our content area.
      * We have many resources posted on our **departmental outreach web page**: <http://www.eaps.purdue.edu/outreach/index.html>
      * We have a **Youtube** channel for Superheroes of Science: <https://www.youtube.com/channel/UCIJnmp1MwUDtm_WMBSarEcw>
      * We have a **Twitter** account for Superheroes of Science: <https://twitter.com/PurdueSOS> @PurdueSOS
  + *Goal 2:****Create and facilitate programs that develop scientifically literate K-12 students***
    - Created online VR tour of the EAPS outdoor Rock display [**https://poly.google.com/view/3RKVpGUU-ay**](https://poly.google.com/view/3RKVpGUU-ay)and The EAPS Goldmine display.
  + *Goal 3:****Create opportunities for broader impact***
    - Collaboration meeting for an NSF digital learning grant.
    - Released for the **Superheroes of Science Podcasts** this month:.
      * Released podcasts from Michelle Thompson, Andy Freed, Birgit Kaufmann, Jani Sparks, and Mike Reppert.
    - Heading Subcommittee for the GLOBE Program U.S. Partner Forum on trainer and master trainer mentoring.
* Personal professional development:

## Working on Google Certified Educator Level 1 training

## Chemistry Outreach

* **Professional Development and Support for K-12 Educators**
  + Met with University Residences team to discuss and formalize agreements for the Summer 2020 teacher professional development programs that will be offered on campus.
  + Helped with the development of an eLearning resource page on the College of Science K-12 Outreach website: <https://bit.ly/PUelearning>
    - The eLearning website was visited 495 times in the month of March.
    - Helped curate a list of online teaching resources for chemistry, linked to the eLearning resource page: <https://bit.ly/scienceremote>
  + Focused efforts to continue developing the Facebook page: Purdue University K-12 Chemistry Outreach (@PurdueChem).
    - Added 17 new followers this month.
    - Posts from this page reached a total of 4,029 people this month.
* **Programs to Develop Scientifically Literate K-12 Students**
  + Worked with Professor Corey Thompson to host a Project SEED Informational Meeting at Purdue for interested high school students and their parents.
  + Loaned an NPK soil testing kit to a local high school student to help that student with a research project.
  + Presentation about “Natural Gas” to 2nd grade students at Warren Central Elementary School during their field trip to Fair Oaks Dairy (Fair Oaks, IN).
* **Opportunities for Broader Impact**
  + Worked with Professor Corey Thompson to host a Project SEED Informational Meeting at Purdue for high school teachers.
  + Met with Dr. Jon Rienstra-Kiracofe to discuss collaboration for an NSF digital learning grant.
  + March 2020 podcasts and YouTube videos released for *Superheroes of Science* include episodes recorded with Professors Michelle Thompson, Andy Freed, Birgit Kaufmann, Jani Sparks, and Mike Reppert.
    - There were 643 total views counted for the Superheroes of Science YouTube channel this month (<https://bit.ly/SOS_UTube>).
    - Twitter (@PurdueSOS) added 19 new followers this month.
    - Twitter (@PurdueSOS) logged a total of 11.3K tweet impressions this month.

## Completed training and passed the Google Certified Educator Level 1 test

## Biology Outreach

1. Met with Edgelea Elementary School about participation in “Family Science Night” activities to be held April 15 2020. Biology Outreach is committed to present a hands-on activity. Because of the COVID 19 outbreak, this has been put on hold.
2. Participated as a judge in the Purdue Regional Science Fair held online Friday March 13. Judged Middle School Science Fair projects.
3. Posted to K-12 Outreach site, online resources for Biology teachers to aid in their online teaching due to the COVID-19 Outbreak.
4. Revising the Weekend Workshop “Basics Statistics for High School Biology teachers” from in-person to online instruction. Workshop will be rescheduled.
5. Reviewing and developing content material (Ecology concepts in Bottle Biology) for proposed Middle School Summer ‘20 Science workshop.

# Science Express

Science Express-The Chemistry, Biological Sciences, and Physics Departments of the Purdue College of Science deliver research-grade instruments to high schools in 17 Indiana counties. Through the month of March 16 teacher/classroom visits were made and there were 974 student/equipment interactions.