

**Chesapeake Section of the AAPT Fall Meeting**  
**Saturday, April 6, 2019**  
**James Madison University, Harrisonburg VA**

Our spring section meeting is quickly approaching at James Madison University in Harrisonburg, Virginia. In addition to contributed talks and demos the meeting will also feature a plenary talk by Dr. Harold Butner of JMU on physics in science fiction as well as a workshop on [Desmos](#) and [Geogebra](#) led by Dr. Pascal Renault of John Tyler Community College.

**Conference Fees:**

Regular Attendee	\$25
Students, K-12 teachers, guests	\$15
K-12 teacher first time attendee	\$5

The conference fee includes continental breakfast, coffee break, lunch, and conference registration.

**Call for talks, demonstrations, and posters:**

**Contributed Talks:** About 15 minutes including questions (depending on the number of submissions).

**Physics Demos:** About 15 minutes including questions. We particularly encourage demos that can be built by anyone and used to teach a standard classroom physics topic, rather than presentations of specialized research apparatus. We also encourage **Make & Takes** where audience members can take something home. We will discount your conference fee by up to the cost of the materials for Make & Takes. If it costs more than the conference fee, please clear it with Alex Barr.

**Contributed Posters:** students and faculty can bring posters to have on display during lunch and coffee breaks for an informal poster session.

**Computational Share-a-thon:** Do you do any class activities using Excel, Trinket, MATLAB, etc.? If so, please consider contributing an activity to the share-a-thon. Simply prepare a 5-minute description of the activity and a link to online files or programs so that other instructors can try the activity in their class. Both polished activities and activities that are still evolving are welcome.

Attendees are welcome to present in multiple categories or to attend without giving a presentation.

There will be **prizes** for best talks and best demo.

**Students** at all levels are encouraged to attend and present. You can present about teaching/learning or about research/projects.

Our meeting room will have a computer with projector and screen. We suggest bringing your presentations on a flash drive and copying them to the room's computer.

Plenary Talk:

**Engaging Your Physics Students Through the Science of Science Fiction**

Harold Butner, James Madison University

*Students often feel that physics is abstract, and that there is no real application of the physics they are exposed to in the classroom to anything outside of the class. I will discuss the first implementation of a junior level class I did for General Education at James Madison University, where the students and I linked science fiction stories we read to physics we discussed in the classroom. The idea is based on examples I also have used in my astronomy course at the University of Lynchburg's Summer Governor's School Program for Math, Science, and Technology over the past few years.*

*My Fall 2018 JMU class used a variety of story sources: assigned short stories, excerpts from movies, cartoons, webcomics, and even video games to compare and contrast how the science in the story was realistic (or not) and how that impacted the source. The class at JMU is part of a pilot program in JMU's General Education Program to have courses that feature integrative learning that would help students connect their classes to other parts of their lives, and ultimately real-world problems.*

Workshop:

**Programming in DESMOS and GeoGebra for computational physics and physics simulations**

Pascal Renault, John Tyler Community College

*This workshop will guide the participants through the development of physics activities using the free online tools DESMOS and GeoGebra. The activities presented are suitable for introductory college students and can be used as simulations, exercises in computational physics, or as programming exercises.*

**Draft Program:**

Saturday

- 8:00 – 8:45 Registration and Continental Breakfast
  - 8:45 – 9:00 Welcome Remarks
  - 9:00 – 11:00 Contributed Talks and Demos I
  - 11:00 – 12:00 Plenary Talk
  - 12:00 – 1:30 Lunch and Posters
  - 1:30 – 3:30 Contributed Talks and Demos II
  - 3:30 – 4:30 Workshop
  - 4:30 – 5:00 CSAAPT Business Meeting (all are welcome)
- Dinner: (optional)

### **RSVP and Abstract Submission:**

We ask that everyone planning to attend the meeting **RSVP by Wednesday, March 27<sup>th</sup>**. To RSVP, send an email to Alex Barr ([abarr@howardcc.edu](mailto:abarr@howardcc.edu)) with the following information:

1. Your name and school/industry affiliation. If you are a student, please indicate so.
2. If you plan to present a talk, demo, or computational activity, include a title and abstract. If you do not plan to give a presentation, please say so.
3. Whether you plan to join us for dinner Saturday night.

**The conference fee will be collected in person the day of the conference.** All you need to do in advance of the conference is send an RSVP email with the above information to [abarr@howardcc.edu](mailto:abarr@howardcc.edu).

### **Local Information**

Our local contact is **Jason Sterlace**. His cell phone number is 804-564-9244 if you need to get in touch with him on the day of the meeting.

### **Campus Map and Directions:**

- James Madison University: 901 Carrier Drive, Harrisonburg, VA 22807
- (Note: if you ask GPS to take you to “JMU”, it will likely take you to the oldest part of campus, which is quite beautiful but is about a mile from where we will meet. I recommend being more specific with your GPS!)
- Written directions: <https://www.jmu.edu/physics/visit.shtml>
- Parking in lot D2, use any spot that is not metered or specifically signed.
- We will meet in the Physics and Chemistry Building, room 2212 on the 2<sup>nd</sup> floor.

### **Recommended lodging**

There are several hotels around JMU. The Quality Inn at 1881 Evelyn Byrd Ave (540-442-1515) is convenient to the Physics and Chemistry Building and has rates around \$80.

**Optional Dinner on Saturday:** To be determined at the meeting

Possible locations:

Union Station Restaurant and Bar: <http://unionstationdowntown.com/site/>

Bella Luna Pasta and Wood-Fired Pizza <https://www.bellalunawoodfired.com/>