

Chesapeake Section of the AAPT Fall Meeting
Saturday, November 10, 2018
Tidewater Community College in Virginia Beach, VA

Our fall section meeting is quickly approaching at Tidewater Community College in Virginia Beach. In addition to the regular talks and demos by section members the meeting will also feature plenary talks by James Lincoln of AAPT and John Adam of Old Dominion University as well as a workshop on increasing female enrollment in physics led by Alma Robinson of Virginia Tech.

We encourage members attending the conference to bring their families and make it a weekend vacation. We have a free planetarium and laser light show Friday night open to all attendees and family members and a fantastic rate Thursday-Saturday at the Barclay Towers, an all-suite oceanfront hotel.

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, sandwich and salad bar lunch, and conference registration. The fee will be collected at the conference.

Please RSVP to Alex Barr (abarr@howardcc.edu) by November 1 if you are interested in coming to the conference, so that we can plan appropriately.

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 and we will discount your conference fee by up to the cost of the materials. (If it costs more than that, please clear it with Alex Barr.)

You may present both a talk and a demo if you like. However, you may not present a demo that is directly associated with your talk. (If you want to do that, include it as part of your talk. I will allot you extra time for that purpose if you request it.)

Contributed Posters: student and faculty posters will be on display during lunch and breaks for an informal poster session.

Computational Share-a-thon: Do you do any Excel, Trinket, Matlab, etc. activities in your class? If so, please consider contributing an activity to the share-a-thon. Simply prepare a 5 minute or less description of the activity and a link to online files or programs so that other instructors can try the activity in their class. The share-a-thon is an extra low pressure setting in which to share ideas and computational activities that are still evolving and may not be ready for a contributed talk.

There will be prizes for best talks and demos. Students at any level are encouraged to attend and/or present. 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 I: The History of Physics Symbols

James Lincoln, AAPT Films

Why do we use h for Planck's constant, or I for current? What does the " a " in $Net F=ma$ really stand for? Who decided, and when, to use c for the speed of light? I have done extensive historical research on several symbols and constants, tracking down when they first appeared in literature and what they actually stand for. The results have been enlightening and that they will help both teachers and students understand the meaning behind the choice for the symbols we use. There is something physically meaningful behind why p stands for momentum, L for angular momentum, and B for magnetic field.

Plenary II: Mathematics in Nature

John Adam, Old Dominion University

From rainbows, river meanders, and shadows to spider webs, honeycombs, and markings on animal coats, the visible world is full of patterns that can be described mathematically.

STEP UP 4 Women Workshop

Alma Robinson, Virginia Tech

Did you know that across the United States, about half of high school physics students are women, but only about 20% of incoming physics majors are women? Further, did you know that if half of high school physics teachers recruited one woman to major in physics, we'd eliminate this gap? The STEP UP 4 Women project is tackling this problem with two research-based lessons and classroom strategies that have encouraged women to major in physics. This interactive workshop will introduce the STEP UP 4 Women project, and provide an overview of the lessons and classroom strategies. Middle school, high school, and college faculty are invited to participate.

Draft Program:

Friday

7:00 pm – 9:00 pm Free planetarium and laser light show at Tidewater CC
Open to all conference attendees and family members

Saturday

8:00 – 8:45 Registration and Continental Breakfast
8:45 – 10:15 Contributed Talks and Demos I
10:15 – 10:30 Break
10:30 – 10:50 Computational Share-a-thon
11:00 – 12:00 Plenary I, James Lincoln “The History of Physics Symbols”
12:05 – 1:05 Lunch and Posters
1:10 – 2:10 Plenary II, John Adam “Mathematics in Nature”
2:15 – 3:10 Contributed Talks and Demos II
3:15 – 4:45 Workshop: STEP UP 4 Women
4:45 – 5:15 CSAAPT Business Meeting (all are welcome)
Dinner: (optional)

RSVP and Abstract Submission:

We ask that everyone planning to attend the meeting **RSVP by Thursday, November 1st**. To RSVP, send an email to Alex Barr (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, poster, or computational activity, include a title and abstract.
3. If you plan to attend but not present, please say so in your email.
4. The first 20 people to request one will receive an eddy current make-and-take demo at the meeting. Please indicate whether you would like one of these demos in your RSVP.
 - a. Everyone will be able to make and take an electrostatic orb and a free fall device
5. Whether you plan to join us for dinner Saturday night.

Local Information

Our local contact is **David Wright**. His cell phone number is 757-375-9953 if you need to get in touch with him on the day of the meeting.

Campus Map and Directions:

- Tidewater Community College: 1700 College Crescent, Virginia Beach
- Park in Parking Lot 8 (no pass required)
- We will meet in the Science Building (Building J), room JC12 (map attached)

Recommended lodging

We have a block of 20 rooms on hold at the Barclay Towers for Thursday-Saturday. Barclay Towers is an all-suite hotel on the boardwalk where we have a special "AAPT group rate" of \$84.08 per night including tax! Our block of **rooms are being held until October 9th**. You can still make reservations after October 9th at the group rate, but availability is not guaranteed.

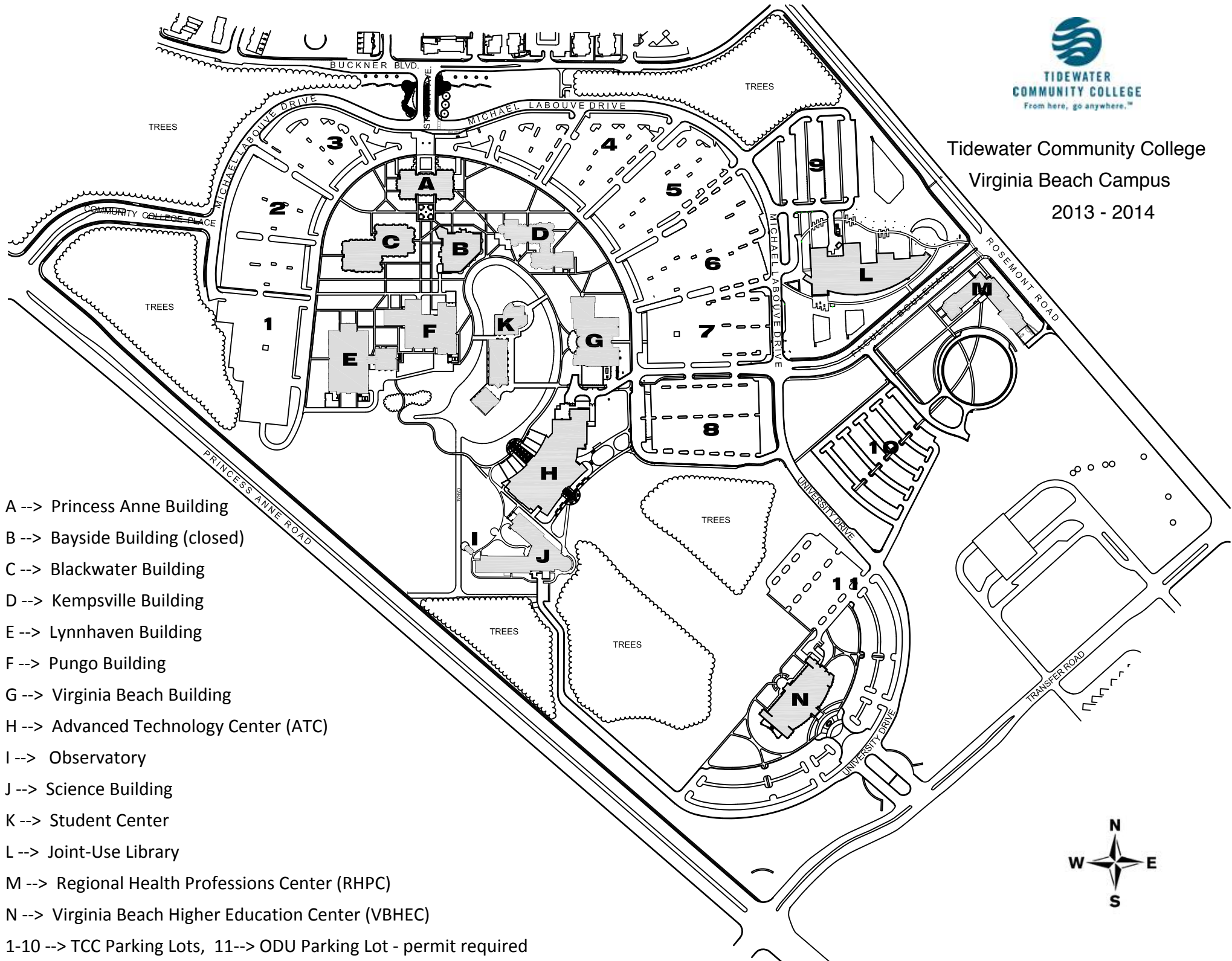
Each suite has a King Bed with a Queen Sleeper sofa, a living room , a full kitchen, and an oceanfront balcony. The hotel also has a heated indoor pool and hot tub, free parking and a continental breakfast. The same rate for one or two adults, and kids under 18 stay for free (up to a maximum of 5 people per room.) If you wish, you can get the same rate for Thursday through Sunday. When you make a reservation there is one night deposit, but it is refundable if you cancel 72 hours before your scheduled arrival. Average high temperature in Virginia Beach on Nov 10 is 64 degrees!

<http://barclaytowersvb.com/the-hotel>

809 Atlantic Avenue
(757) 491-2700

Dinner on Saturday: [Captain George's](#) or [The Lucky Oyster](#)

Tidewater Community College
Virginia Beach Campus
2013 - 2014



- A --> Princess Anne Building
- B --> Bayside Building (closed)
- C --> Blackwater Building
- D --> Kempsville Building
- E --> Lynnhaven Building
- F --> Pungo Building
- G --> Virginia Beach Building
- H --> Advanced Technology Center (ATC)
- I --> Observatory
- J --> Science Building
- K --> Student Center
- L --> Joint-Use Library
- M --> Regional Health Professions Center (RHPC)
- N --> Virginia Beach Higher Education Center (VBHEC)
- 1-10 --> TCC Parking Lots, 11--> ODU Parking Lot - permit required





Virginia Beach Campus

A --> Princess Anne Building
<ul style="list-style-type: none"> • Provost office • Dean of Student Services office, room A-102 • Admissions • Enrollment Services • Counseling • Career and Employment Services • Student Activities • Business office • Student/Staff ID cards • Women’s Center
B --> Bayside Building (closed)
C --> Blackwater Building
<ul style="list-style-type: none"> • Mathematics Faculty & classrooms • Hotel Management Faculty & classrooms
D --> Kempsville Building
<ul style="list-style-type: none"> • CMVE Center of Military and Veterans Education • Financial Aid • International Student Services & Global Studies
E --> Lynnhaven Building
<ul style="list-style-type: none"> • Math Lab • Computer Lab • Tutoring • Writing Center • Language Lab • Child Development Lab • Hampton Roads Maritime Training Program • Apprenticeship classroom & ARI staff
F --> Pungo Building
<ul style="list-style-type: none"> • Humanities Division office, room F-118 • Faculty offices • Classrooms • TCC Security office

G --> Virginia Beach Building
<ul style="list-style-type: none"> • Social Sciences & Public Services Division office, room G-147 • Faculty offices • Classrooms • Testing Center • Funeral Services Lab • Facilities Department
H --> Advanced Technology Center (ATC)
<ul style="list-style-type: none"> • Information Tech. & Business Division office, room H-229 • Engineering, Math & Industrial Tech. Division office, room H-118 • Faculty offices • Classrooms • Open Computer Lab • SMART (NSF) Maritime & Transportation Center
J --> Science Building
<ul style="list-style-type: none"> • Natural Sciences Division office, room JA-16 • Faculty offices • Classrooms • Planetarium
I --> Observatory
K --> Student Center
L --> Joint-Use Library
<ul style="list-style-type: none"> • Open Computer Lab
M --> Regional Health Professions Center (RHPC)
<ul style="list-style-type: none"> • Health Professions Division office, room MN-302 • Faculty offices • Classrooms
N --> Virginia Beach Higher Education Center (VBHEC)

Security Phone Numbers

757-822-7038