Minutes

of the Physics Department meeting held on Wednesday, Apr 30, 2014 in UH168.

Present: Benjamin, Boukahil, Constantinescu, Nawash, Sahyun, Rybski, Yavuzcetin **Absent:**

- I. Benjamin called the meeting to order at 5:40 pm.
- II. Rybski/Boukahil moved to approve the minutes of Mar 12, 2014 meeting. Motion passed.
- III. Old Business
 - a. The department reviewed the status of student summer research/internship plans:
 REUs: Monica Ripp (U of Chicago), Kylee Martens (TCU), Denisa Goia (UC-Davis), Ryan Aprahamian (UW-Madison), Alex Orchard (UW-Madison).
 Internships: Matt Makowski (Pinacle/Birds Eye—tentative), Brandon Behnke (Forte)

Department research (Yavuzcetin): Freeman (WiscAMP grant), Dorn (McNair Scholar), Deane Page (2014 SURF Fellowship)

Department research (Nawash): Andrew Eagon

- b. The department reviewed the status of this semester's graduates: Alexandre Fernandes (University of Albany physics grad school) Isaac Xu (Illinois Institute of Technology) David Carroll (Blackthorn) Brian Chapman (staying to complete a Japanese/physics double major).
- c. The department reviewed the scholarship award winners: Monica Ripp (Fok and Metcalf Family), Denisa Goia (Upham), Benjamen Etzkin (Physics Excellence Award), Michael Dorn-Reed (McNair Scholarship), Bishop Freeman (Integrated Bus/Science, WiscAMP), Ryan Aprahamian (Special Physics Award).
- d. The department discussed their concerns about the proposed on-line course evaluation form for the CLS. There was some concern about the "summative" questions that did not provide enough information for faculty to improve. The overall sense of the department was that it was satisfied with the current on-line form and did not want to adopt the suggested CLS form. Constantinescu pointed out that our departmental form needs a second version for on-line courses.
- e. There was a discussion on the use of student comments in the on-line course evaluations and whether it was appropriate for these comments to be available to

the Dean or the Provost for use in Promotion and Tenure decisions. The department was satisfied with the current departmental policy.

- IV. New Business
 - a. Departmental meetings were scheduled for the following dates/purposes: Monday, May 12: 1-3 pm (Assessment)

Thursday, May 15: 3:15-5:15 pm (Annual Report and Final Budget report) If University policy allows, we will also schedule meetings related to promotion/tenure/consultation for the time period between Wed, Aug 20 (start of contract period) and Wed, Sep 3 (1st day of classes). Please make sure to contact Benjamin if you need to make plans during this time.

b. There was no other new business

V. Announcements

- a. Chair's Announcements
 - There will be a year-end "Pizza and Robots" celebration on Friday, May 9 from noon-1pm. Faculty will spring for the pizza and students from Prof. Rybski's Digital Electronics class will present their robots. Benjamin will be Master of Ceremonies and will announce all of the graduates, students with internships and REUs, and scholarship winners.
 - Please review the list of software provided on campus computers, Steve and Paul's requests and make sure to tell Steve what programs you would like to make sure is added. Steve will work with Matt Baier to make this so. The deadline to do this is TOMORROW.
 - iii. There will be a three-way split of chair duties during the summer: June (Sahyun), July (Rybski), August (Benjamin). Please make sure to copy departmental related e-mail to Benjamin even in June and July.
 - iv. The College has generously agreed to replace our failing computers in the Upham 58 introductory lab. Benjamin will check with Associate Dean Goza on the status of the order.
 - v. The Science & Mathematics Honors Ceremony and Reception was held on April 24, 2014. Patti Filipiak did a tremendous job putting the program together. The room was filled, most of the students were present, some with family members, and everything went great. Thanks to Steve Sahyun for handing out the Physics awards and to Kerry Katovich for replacing Benjamin as the Master of Ceremonies.
 - vi. Administrative Council (April 9)

- Seth Meisel presented information on the PIE (Partners in Education) program. These are called "dual enrollment" courses. Very positive results, especially in terms of building connections with high schools. Legislature says that all high schools must provide at least two dual enrollment courses at no cost. DPI said that colleges should pick up the costs. We are currently doing partnership with Green Bay and Stevens Point. UW-Whitewater offers popular CompSci (162) courses. UW-Stevens Point (?) is offering dual enrollment in astronomy.
- Lynsey Schwabrow of Institutional Research met with Administrative Council. New website live on May 15, will have visualizations using *Tableau*, and lots of data sets, for example the "Fall Profile" (after 10th day). They will also be introducing *Qualtrics* (UW has a site license) to help faculty develop surveys. This program has the ability to export to Facebook or use personal electronics to collect information—for example, text every student a question.
- 3. Summer contracts are due by May 1.
- 4. Annual reports are due May 20.
- 5. There was a spirited discussion on the use of student comments for evaluation of candidates for promotion and tenure.
- The College is doing a faculty workload analysis at the request of the state legislature. Benjamin is verifying the data for our department for the 2012-2013 academic year.
- vii. Administrative Council (Apr 23, P. Rybski filled in)
 - 1. There was a presentation on the freshman orientation program.
 - 2. Dean Travis discussed the responsibilities of summer chairs.
 - Assistant Dean Hachten announced that Summer Assessment projects are due to her and Frank Goza by May 9.
 - 4. Student help request to the Provost exceeded \$300K. It is not clear how much support will be provided to the CLS.
 - There is the opportunity for faculty to apply for research reassignment. Six half-time reassignments will probably be available.

- Department chair evaluations are to be done in the 2nd year for all chairs. A survey will be sent to all faculty.
- Faculty are encouraged to provide "trigger warnings" on their syllabus if their class will include any issues or techniques that could cause problems for students with sensitivity to flashes, violence, loud noises, etc.
- 8. Assistant Dean Hachten reminded chairs that an assessment report should be included as a separate addendum to the Annual report.
- b. Other announcements
 - *i*. Nawash presented a poster at the *NGC2014 conference* in Tempe, AZ (March 10th to March 14th): "Incongruent Crystal Growth of Select II-VI Oxides for Applications in Optoelectronics". This poster received a 7th place prize.
 - *ii.* Rebecca Holzer (Nawash) and Alexandre Fernandes (Benjamin) presented posters at this year's Science Alliance meeting on March 14.
 - *iii.* Three students working with Nawash presented posters at UW-W
 Undergraduate Research Day (Rebecca Holzer, Andrew Eagon, and
 Junxiang Xu). Holzer received an award in the Physics and Mathematical
 Sciences Category.
 - *iv.* Both Junxiang Xu and Rebecca Holzer also presented posters at this year's NCUR meeting held April 3 to 5 in Lexington, KY.
 - v. Nawash organized a field trip for his Modern Physics class to Forte.
 - *vi.* Nawash arranged a summer internship for physics major Brandon Behnke at *Forte* for this summer.
 - vii. Benjamin received a grant for \$4963 from the Wisconsin Space Grant Consortium Research Infrastructure program. He will use the grant to take students to Kitt Peak and set up a program to catalog and analyze variable stars discovered as part of the GLIMPSE project. Constantinescu will collaborate on this project.
 - *viii.* Benjamin submitted a small (14-orbit) proposal on April 11 to use the Hubble Space Telescope to study outflows of gas from the Milky Way.
 - *ix.* Benjamin did a presentation on black holes for 6th, 7th, and 8th graders at Whitewater Middle School on April 30. There were quite a few questions.

- *x.* Sahyun participated in the April 22, Earth Week 2014 activities. He demonstrated solar electricity and motors, and also provided rides on the electric bicycle.
- xi. Sahyun attended the March 19, 2014 Whitewater High School "Science Night 2014". He provided interactive demonstration of a vortex cannon to have kids knock down stacked cups.
- *xii.* Boukahil presented two papers at the APS (American Physical Society) March meeting in Denver, CO.
- *xiii*. Sahyun announced that physics course curricular changes in Physics 364 and 310 were passed by the Curriculum committees of the College and the University.
- xiv. Yavuzcetin announced his most recent publication:
 Yury Petrov, Jeffrey Nador, Christopher Hughes, Stanley Tran, Ozgur Yavuzcetin, Srinivas Sridhar, "Ultra-dense EEG sampling results in two-fold increase of functional brain information", NeuroImage, 90, 140-145 http://dx.doi.org/10.1016/j.neuroimage.2013.12.041, (2014).
- *xv.* Benjamin announced his most recent publications (with a former UW-Whitewater student):

• Hill, A.S., Benjamin, R.A., Haffner, L.M., Gostisha, M.C. & Barger, K.A. 2014, Astrophysical Journal, 787, 106, *H-alpha and [SII] Emission from Warm Ionized Gas in the Scutum-Centaurus Arm*: http://adsabs.harvard.edu/abs/2014ApJ...787..106H

- *xvi.* Paul Rybski assisted in creating and distributing publicity for both Chris
 Paine's lecture for Earth Day on Monday, April 21st, and for the
 Advanced Technology Automobile Show on that Monday
- xvii. On Friday, April 25th, Observatory Director Paul Rybski and Observatory Assistant Cameron Robinson hosted Resident Assistant Anthony Lindsey's dormitory floor residents from 8:45 to 10:30 PM. Fifteen students attended. Because of residual cloudiness, only Mars, Jupiter and the galactic star cluster Messier 44 ("Praesepe") were observed. Despite this limited observing, Lindsey reported that many other residents wanted to attend later sessions this semester after those who attended reported back how much they enjoyed their observing session.
- xviii. On Wednesday, April 30th, Rybski began working with Campus Engineer David Dorgan and Maintenance Supervisor Paul Walton on replacing the decking of the Outside Observing Platform at the Observatory. Inspection suggested that the stringers to which the decking is secured will not have

to be replaced, greatly reducing the cost of the project. The existing 20 year-old, chemically treated wooden planking will be replaced with plastic composite decking planks with a rough, antiskid surface.

- xix. Also on Wednesday, April 30th, Rybski worked with Walton on scheduling the repair of the Observatory dome slit-raising motor that failed on April 25th and the repair of the broken crank on the lower slit. Oher more routine maintenance issues, such as sticky locks, a badly installed rain gutter over the entrances to the Observatory and nonfunctioning locks were scheduled for repair.
- xx. Rybski began working with Dean David Travis on April 23rd to replace the existing telescope in the Observatory with a modern, maintainable, research-capable telescope system of at least 0.4 meter aperture. This renovation would include the acquisition of a research-grade CCD system and upgrading the computers used for student instruction in the Observatory.
- *xxi.* Benjamin announced he will be serving on the National Optical Astronomical Observatories Telescope Allocation Committee (TAC) for the next two years. His first review was May 7, 2013 serving on the Galactic and Solar System TAC
- VI. Boukahil/Nawash moved to adjourn at 6:41. Motion passed.

Submitted by B. Benjamin, secretary of the day

Cc: Dean David Travis