

SUMMARY OF CAP PHYSICS DEPARTMENT SURVEY – 2015

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Since 2013, the Canadian Association of Physicists (CAP) has carried out an annual on-line survey of Canadian physics departments. The information collected by the survey from the past three years is stored in a CAP database that the department members can view at any time^[1]. Each year a summary of the survey results is published in *Physics in Canada*^[2,3]. Along with the basic data including number of students, number of faculty and number of staff, etc. there is a second section that looks at the graduate programs offered by the various departments. The information about the graduate programs is then part of an on-line directory of Canadian physics graduate programs that can be found on the CAP website^[4].

There is still some ambiguity in some of the questions such as the number of BSc physics graduates. The number of graduating students jumped from 625 to 988 in the past year mostly because two of the larger departments changed their numbers this year to include majors as well as honours students. It is not clear then if other departments are counting just honours physics or also the majors. We have tried over the past years to lessen the ambiguity while not making the number of questions onerous for the respondents. We will consider adding a question to clarify honours and majors undergraduates as well as adding questions to determine the number of female undergraduate and graduate students. We currently only ask about the number of female faculty.

The results of the 2015 Department Survey are summarized in Table 1 and Fig. 1. Table 1 reports the number of departments responding and the average number of faculty per department. It also reports total numbers of BSc, MSc and PhD graduates, and the total number of physics faculty. Figure 1 plots (a) the number of single semester courses taught per faculty, (b) the number of BSc graduates (with the exception of one outlying data point of 300 students/40 faculty), (c) the number of graduate students, (d) the number of pdf's, and (e) the number of female faculty, all plotted as a function of number of faculty.

The main trends that we recently added to the survey and intend to expand on in next year's report are the percentage of female faculty and the percentage of teaching faculty to research faculty. We have only collected this data during the past two years and over that short time the percentages have not changed. During the same time period 29 new hires were reported which is just 4% of the total number of faculty so

TABLE 1
SUMMARY OF RESULTS OF CAP PHYSICS
DEPARTMENT SURVEY – 2015.

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|----------------------------------|-----------|
| Number of Departments Reporting | 39 (66%) |
| Total Number of Faculty | 702 |
| Average Number of Faculty | 18 |
| Smallest Number of Faculty | 4 |
| Largest Number of Faculty | 62 |
| Total Number of Research Faculty | 623 (89%) |
| Total Number of Female Faculty | 113 (16%) |
| Total Number of New Faculty | 29 |
| Total Number of PDFs / RAs | 318/190 |
| Total # of BSc Graduates / Year | 988 |
| Total # of MSc Graduates / Year | 253 |
| Total # of PhD Graduates / Year | 212 |

not a large change can be expected. The average numbers remain at 16% female faculty and 11% teaching faculty. There is a large spread in numbers of female faculty with the percentages ranging from 0 to 40%.

Over the next few years, we hope this survey will help determine trends in physics participation across Canada. The trends will be easier to determine if **all** Physics departments in Canada participate in the survey. In the past two years, we have had 39 departments fill out the survey each year, but only 30 departments participated both years. There are a total of 59 departments, so we are only tracking 51% of the academic physics community consistently. I do want to thank all the departments that took the time to fill out the survey and I would like to encourage all the departments to take part in the coming years.

I would like to express my appreciation to the CAP staff who supported the development and analysis of the survey.

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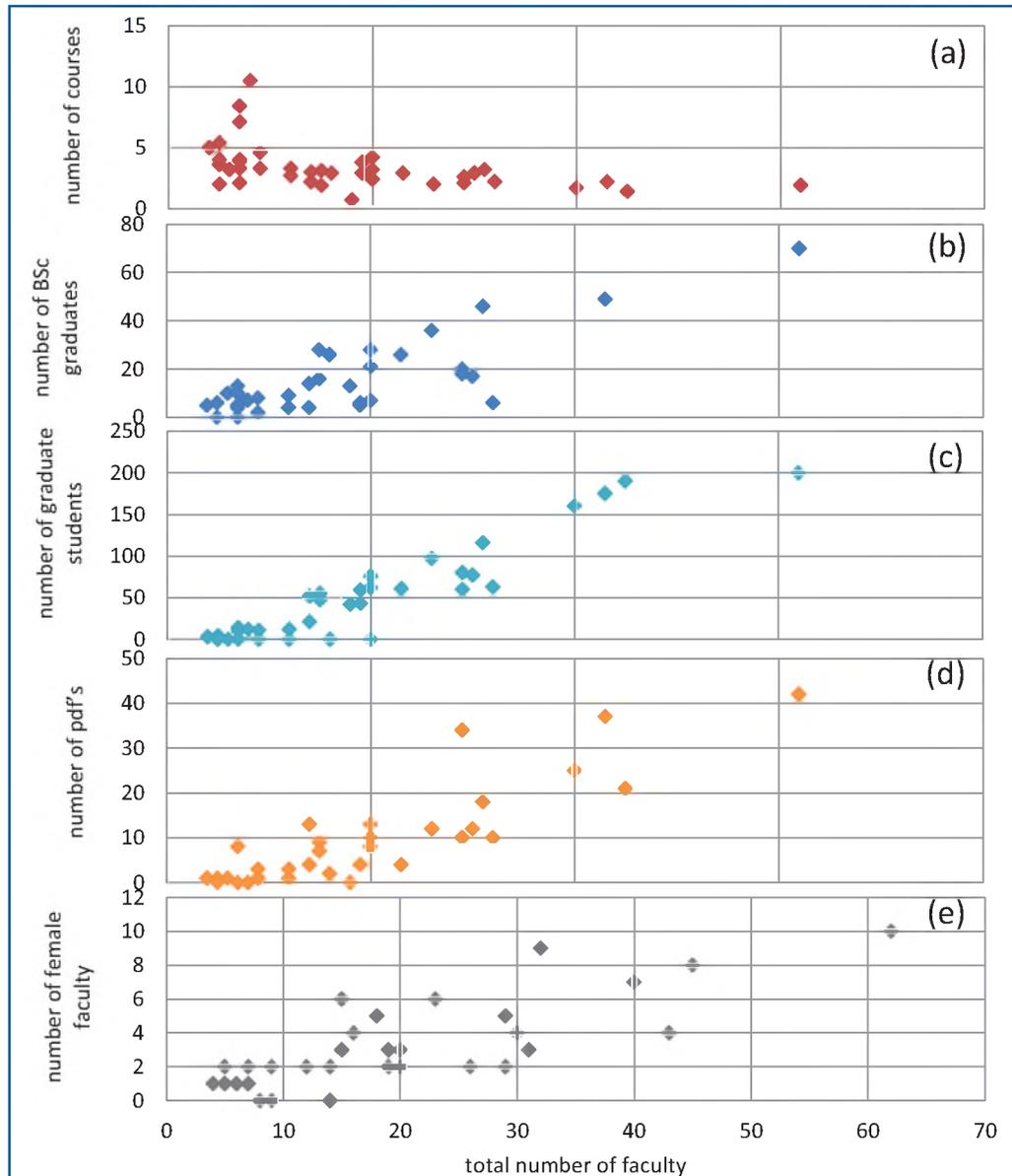


Fig. 1 (a) Number of course sections (one semester courses or equivalent) taught per faculty member per year; (b) Number of BSc graduates per year; (c) Number of grad students enrolled; (d) Number of postdoctoral fellows; and (e) Number of female faculty members, for Canadian physics departments, plotted as a function of the number of faculty members.

REFERENCES

1. Departments can access the Survey through the Member Services Login page (<https://www.cap.ca/services/>) using their department id and password. For help with this, please contact the CAP Office: capmgr@uottawa.ca.
2. Barbara Frisken, "Summary of CAP Physics Department Survey 2013", *Physics in Canada* **70**, 198 (2014).
3. Barbara Frisken, "Summary of CAP Physics Department Survey 2014", *Physics in Canada* **71**, 214 (2015).
4. <http://www.cap.ca/en/students-educators/graduate-programs>