

Metrics Report: PHYSICS & ASTRONOMY.

NOTE: In the absence of a full narrative, I have prepared a brief high-level analysis of the Physics collection. For future reference, it may be useful to document some of the information I used in this analysis. Thus, this is more of a sketch than a report. -LKM

I. Program Overview

The Emory University Department of Physics¹ consists of 21 faculty members:

- 7 Professors
- 5 Assistant Professors
- 5 Associate Professors
- 1 Adjunct Associate Professor
- 3 Lecturers (1 Lecturer, 2 Senior Lecturers)

Additionally, the Physics Department has two Teaching Affiliates, 9 Postdoctoral Fellows and 14 graduate students. No information was readily visible regarding the numbers of Master's- and Ph.D.-level students, nor did I find numbers of undergraduate majors and minors.

According to the departmental website, research supported by external funding “is focused in two principal areas: Soft Condensed Matter Physics and Molecular Biophysics”. Other areas of research include semiconductor theory, astronomy & cosmology (QB), nuclear physics, and quantum mechanics. Much of the work done in this department is interdisciplinary in nature; there is research overlap with Mathematics & Computer Science (optimization, neural networks, nonlinear dynamics – QA) and with the Life Sciences (Biology, Biophysics – QH; Biochemistry, Physiology – QP), as well as work in Physical Chemistry and applied physics & chemistry.

Using the call-number ranges employed in the NATC, here is the distribution of faculty research interests within the QB and QC call numbers².

QC 1-75	Physics, General	2	QC 251-338	Heat	0
QC 81-119	Weights & Measures	0	QC 350-496	Light, Optics, Radiation	3
QC 120-168	Experimental Mechanics	2	QC 501-798	Electricity, Magnetism, Nuclear Physics	4
QC 170-220	Constitution & Properties of Matter	7	QC 801-999	Geophysics & Meteorology/ Climatology	0
QC 221-246	Sound	0	QB 1-999	Astronomy	2

¹ <http://www.physics.emory.edu/index.html> (viewed 2 December 2004)

² Interdisciplinary interests falling outside the QB & QC classes are not tabulated here. Faculty members with multiple interests have been counted in multiple categories.

The Physics Department offers degrees in Physics and has recently (according to the departmental website) added an Astronomy program. The following degree plans and concentrations are offered:

- Minor: *Physics; Astronomy*
- B.A.: *Physics; Physics & Astronomy*
- B.S.: *Physics; Applied Physics; Physics & Astronomy*
- M.S.: *Physics*
- Ph.D.: *Physics*

A plan also exists wherein a graduate student may earn a Ph.D. in Physics and an M.S. in Computational Science concurrently.