

February 12, 2019

Theresa W. Lynn, PhD  
Chair and Professor of Physics  
Harvey Mudd College  
Claremont, CA 91711  
[lynn@hmc.edu](mailto:lynn@hmc.edu)

Re: Decline in HMC Physics Majors at Stanford Graduate School

Dear Chair Lynn,

I received your November 15, 2018 email containing the **2018 HMC Physics Highlights** ([https://drive.google.com/file/d/1ZbNXRnVzbdNjgoZuS\\_V\\_DKRYQvye1U6S/view](https://drive.google.com/file/d/1ZbNXRnVzbdNjgoZuS_V_DKRYQvye1U6S/view)). I am a HMC physics major from the Class of 1965. When I was admitted to HMC in early 1961 there were only 4 HMC graduates and when I was accepted into the physics PhD programs at Stanford and Caltech in early 1965 no HMC graduate had received a physics PhD. Because I am still interested in HMC physics, I have analyzed “Where HMC Physics Majors Attend Graduate School” (<http://physics.hmc.edu/student/grad/?startyear=1961>). I have followed the graduates using information from the HMC and Stanford Alumni Associations and other public Internet sources. When grouped in four 15-year graduation periods from 1959 to 2018, there has been a dramatic decline in the number and proportion of HMC graduates who have attended Stanford as physics majors and obtained physics PhDs. Among the 51 HMC physics majors at Stanford Graduate School, only 10 have obtained a physics PhD and only 2 have obtained a physics PhD since 1988. The student names, degrees, current positions, and numbers are shown in the three tables below.

I request the opportunity to speak with you about my analysis. In particular, I would like its accuracy to be confirmed and the dramatic decline in HMC physics majors at Stanford to be explained.

Thank you very much for your consideration of this matter.

Sincerely yours,

James E. Enstrom, PhD, MPH  
Co-Valedictorian, HMC Class of 1965  
1965 Thomas B. Brown Memorial Award  
UCLA and Scientific Integrity Institute  
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Table 1. HMC Physics Majors Who Have Attended Stanford Graduate School  
<http://physics.hmc.edu/student/grad/?startyear=1961>)

**Stanford  
University (51)**



Xinrui (Cynthia) Yan ('18) Alexander Kendrick ('15) Anthony L. Corso ('14) Julien B. Devin ('12) Kali L. Allison ('12) David A. Berryrieser ('10) Samuel D. Eisenberg ('08) Karen F. Shakespear ('06) Cristopher R. Cecka ('06) Michael (Mike) H. Price ('03) Jason M. Hogan ('03) Austin L. Brown ('02) Nicholas P. Breznay ('02) David A. Mann ('01) Paul G. SanGiorgio ('01) Thaddeus (Ted) D. Ladd ('98) Sharon E. Ungersma ('98) William (Bill) B. Mitchell ('95) Dario G. Falquier ('93) Thomas Wayman ('91) David (Dave) M. King ('89) Patrick (Pat) M. Tom ('88) George S. Park ('88) Bardia Pezeshki ('87) Michial (Duff) D. Howell ('86) Steven (Steve) R. Spielman ('86) Charles E. Cunningham ('86) Donald (Don) H. Fujino ('84) Arthur (Art) H. Walker ('81) Mark A. Muntean ('79) Charles (Chuck) Horowitz ('78) Thomas (Tom) E. Taylor ('77) Kenneth R. Nielsen ('76) Stephen (Steve) J. Brosnan ('73) R. (Andy) Duncan ('71) Gregory (Greg) L. Campbell ('70) Dale R. Peterson ('70) William (Bill) C. Jensen ('69) E. (Wayne) Torigoe ('69) Scott A. Hutchason ('69) Duane A. Naff ('69) W. (Al) Sikes ('67) Stephen (Steve) L. Quilici ('67) George B. Rothbart ('67) Robert (Bob) P. Charrow ('66) Gary E. Modrell ('66) John H. Halperin ('66) James (Jim) E. Enstrom ('65) Kenneth (Ken) R. Lorell ('65) Kenneth (Ken) P. Kuskey ('63) Harald H. Weiss ('63)

Table 2. HMC Physics Majors Who Have Obtained a Stanford Physics PhD. This information is from the HMC and Stanford Alumni Associations and other public Internet sources.

Jason M. Hogan	(BS '03, PhD '10) Assistant Professor, Physics, Stanford U, Stanford, CA
Paul G. SanGiorgio	(BS '01, PhD '08) Systems Engineer, Illumina, Inc, San Diego, CA
George S. Park	(BS '88, PhD '94) Director, Bus Development, IPVALUE, Los Gatos, CA
Charles E. Cunningham	(BS '86, PhD '92) Professor, Physics, Grinnell College, Grinnell, IA
Donald H. Fujino	(BS '84, PhD '92) Research Scientist, Lawrence Nat Livermore Lab, CA
Arthur H. Walker	(BS '81, PhD '90) Unknown Occupation, Menlo Park, CA
Charles Horowitz	(BS '78, PhD '82) Professor, Physics, U Indiana, Bloomington, IN
Ernest Wayne Torigoe	(BS '69, PhD '75, MD '78 UCLA) Physician, Greenbrae, CA
George B. Rothbart	(BS '67, PhD '75) CEO, Software Science, Burlingame, CA
James E. Enstrom	(BS '65, PhD '70, MPH '76 UCLA) Retired Research Professor, UCLA SPH and President, Scientific Integrity Institute, LA, CA

Table 3. HMC Physics Majors at Stanford by Graduation Years:All Attendees and Physics PhDs

Years of Graduation (15-year periods)	Total HMC Graduates	HMC Physics Majors at Stanford Graduate School			
		All Degree Programs		Received Physics PhD	
		Number	Percent of Total	Number	Percent of Total
1959-1973	~700	18	2.571%	3	0.429%
1974-1988	~1,500	12	0.800%	5	0.333%
1989-2003	~1,700	12	0.706%	2	0.118%
2004-2018	~3,000	9	0.300%	0	0.000%
1959-2018 Total	~6,900	51	0.739%	10	0.145%