

APS Minorities in Physics Statistics

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<https://www.aps.org/programs/minorities/resources/statistics.cfm>

How APS Collects Data

Data Collection

Data are collected from the [Integrated Postsecondary Education Data System \(IPEDS\)](#) provisional releases for each year. IPEDS data are collected from every institution on the National Center for Education Statistics (NCES) list of institutions, which includes institutions based on degree-granting status and participation in Title IV federal financial aid programs. Each institution appoints a person to complete the IPEDS survey from which the data are gathered. Data include all physics degrees as well as degrees that are frequently awarded in physics departments, such as engineering physics/applied physics, astrophysics, and physics teacher education. At institutions that have separate departments for e.g. applied physics or astrophysics, the data reflect the total number of degrees awarded in physics and allied departments. For institutions in CIP code 13.1329 (Physics Teacher Education degrees) to be counted, they must offer at least a physics minor.

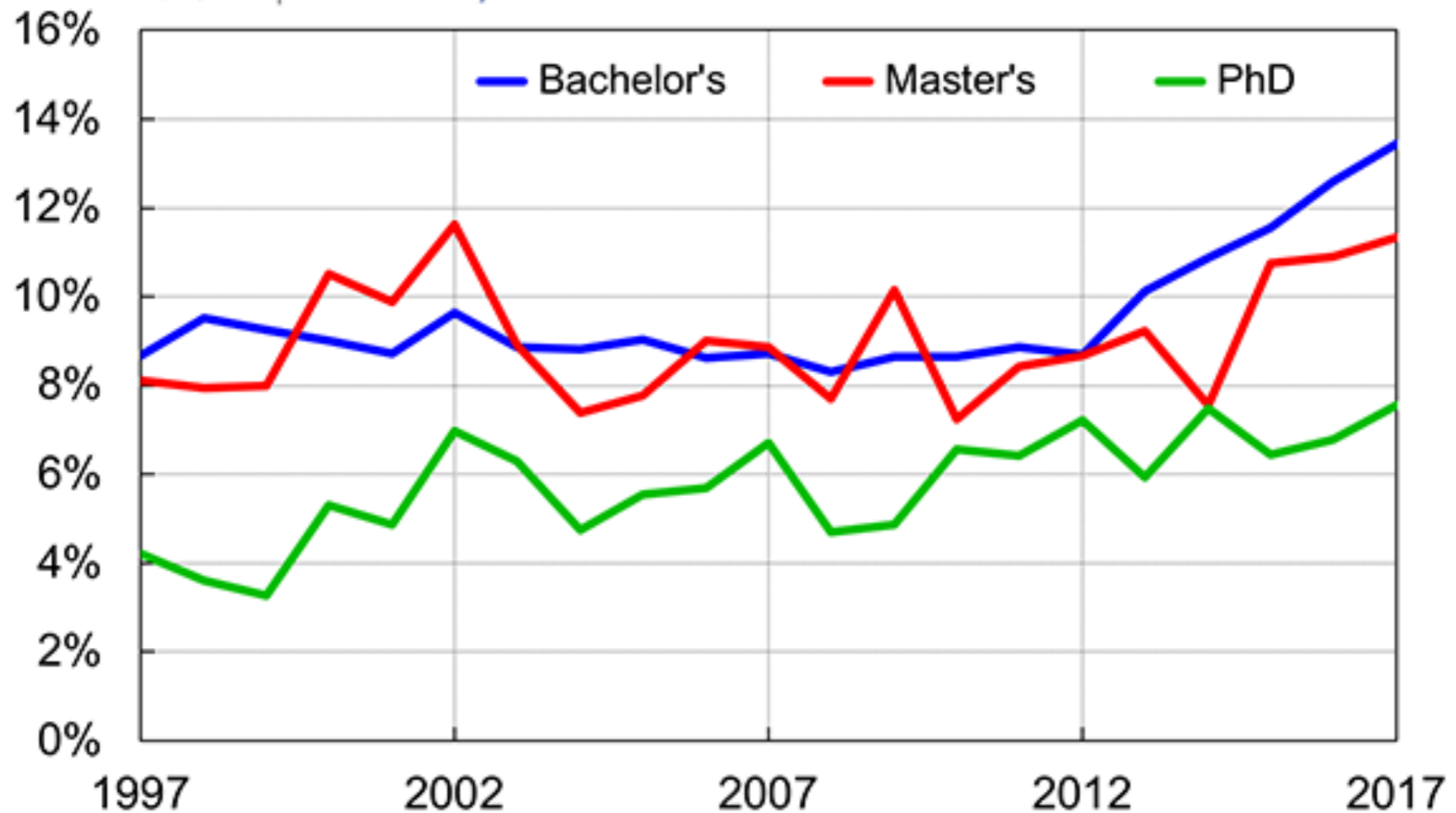
For underrepresented ethnic/racial minorities (URM), we include the following categories:

- Black or African American;
- Hispanic or Latino;
- Native Hawaiian or Other Pacific Islander; and
- American Indian or Alaska Native
- who are U.S. Citizens or Permanent Residents. To calculate the percentage of URM degrees, we divide by the total number of degrees to only U.S. Citizens and Permanent Residents.

Questions and Information

Email education@aps.org

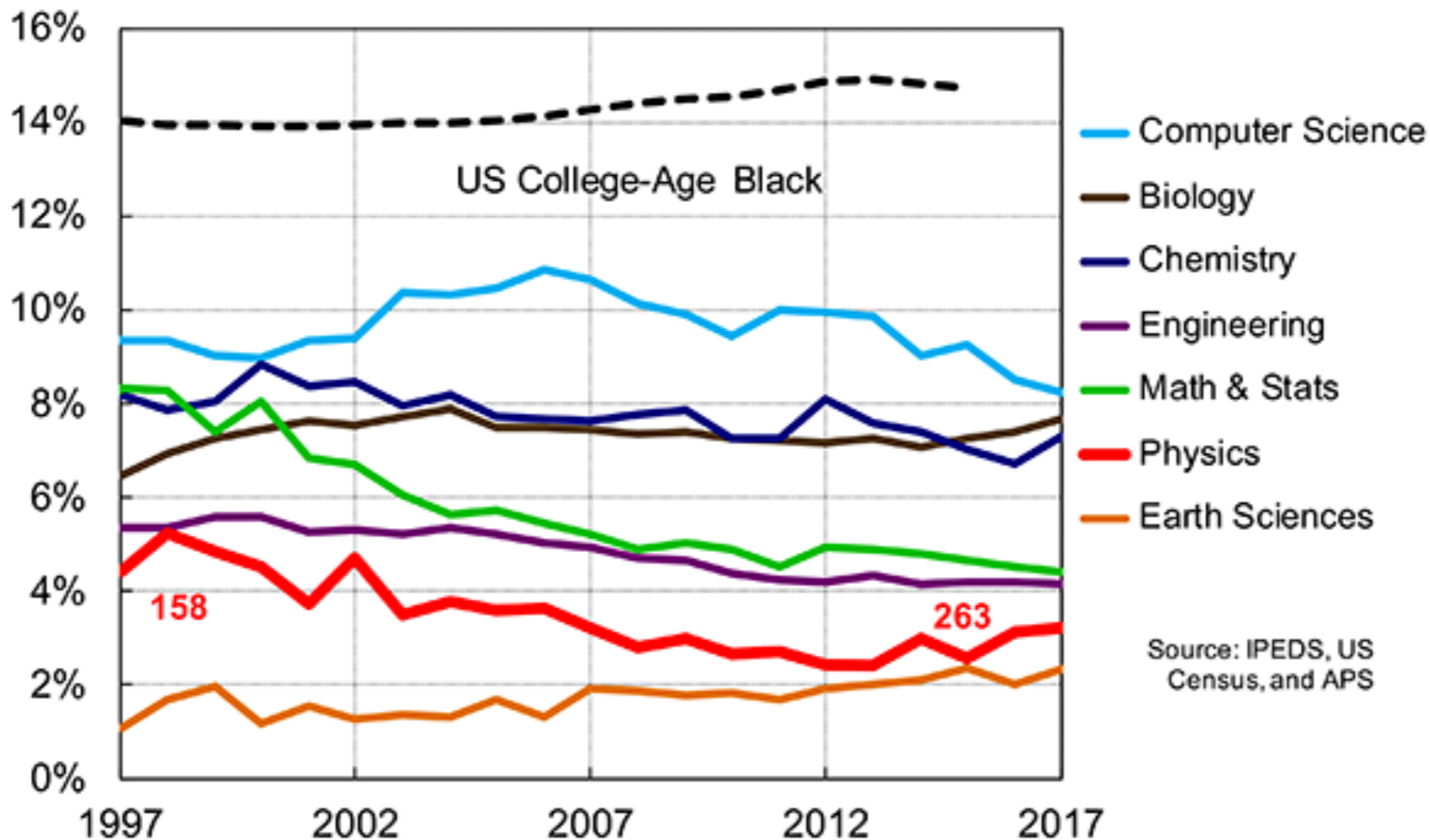
Underrepresented Minorities in Physics



Source: IPEDS and APS

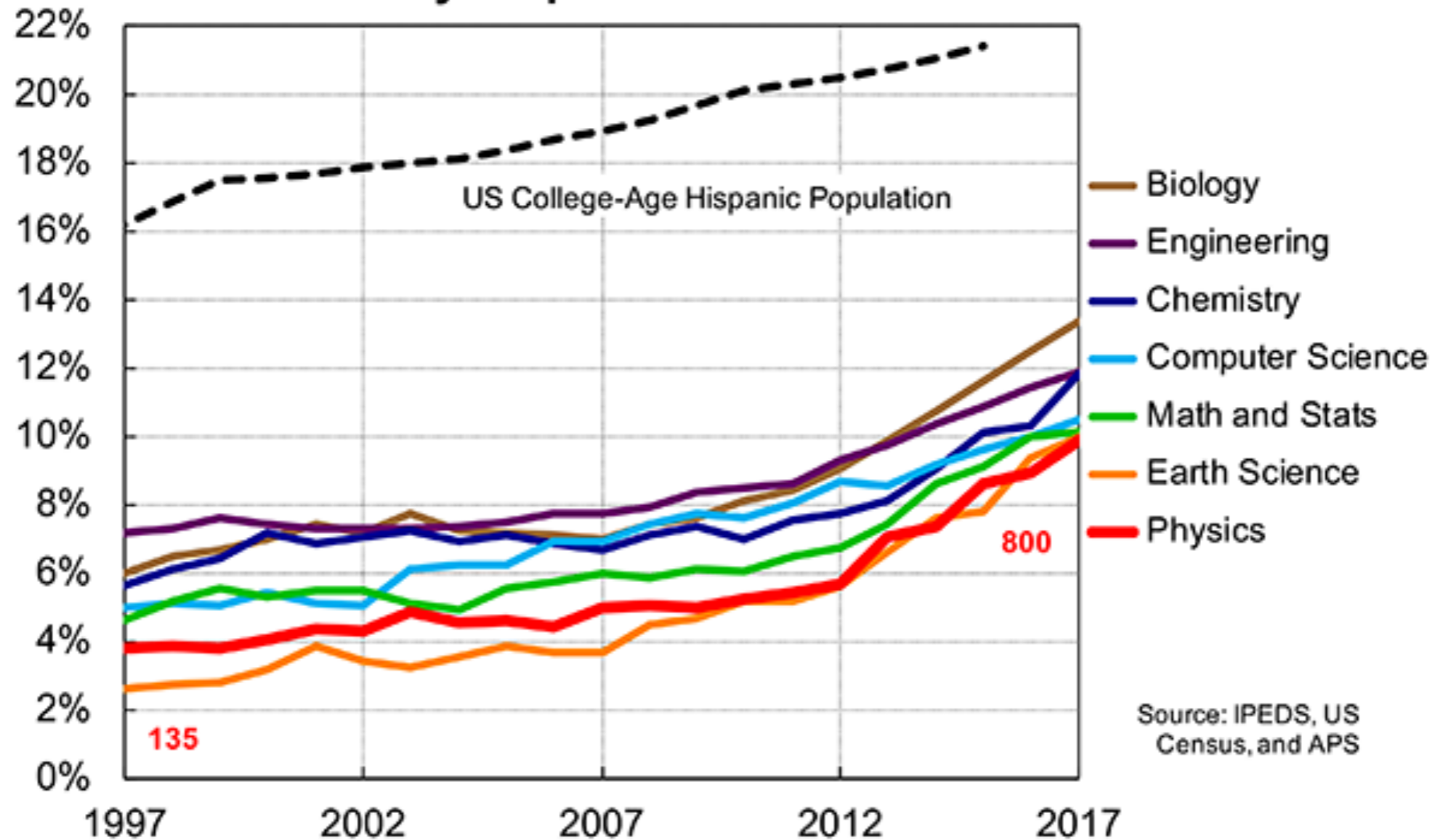
This graph shows the percentage of bachelor's, master's, and doctoral degrees awarded to underrepresented ethnic and racial minorities (URMs) in physics at U.S. institutions. In this case, URMs include African Americans, Hispanic Americans, American Indian/Alaska Natives and Native Hawaiians. Degrees awarded to temporary residents are excluded from calculations.

Bachelor's Degrees Earned by African Americans



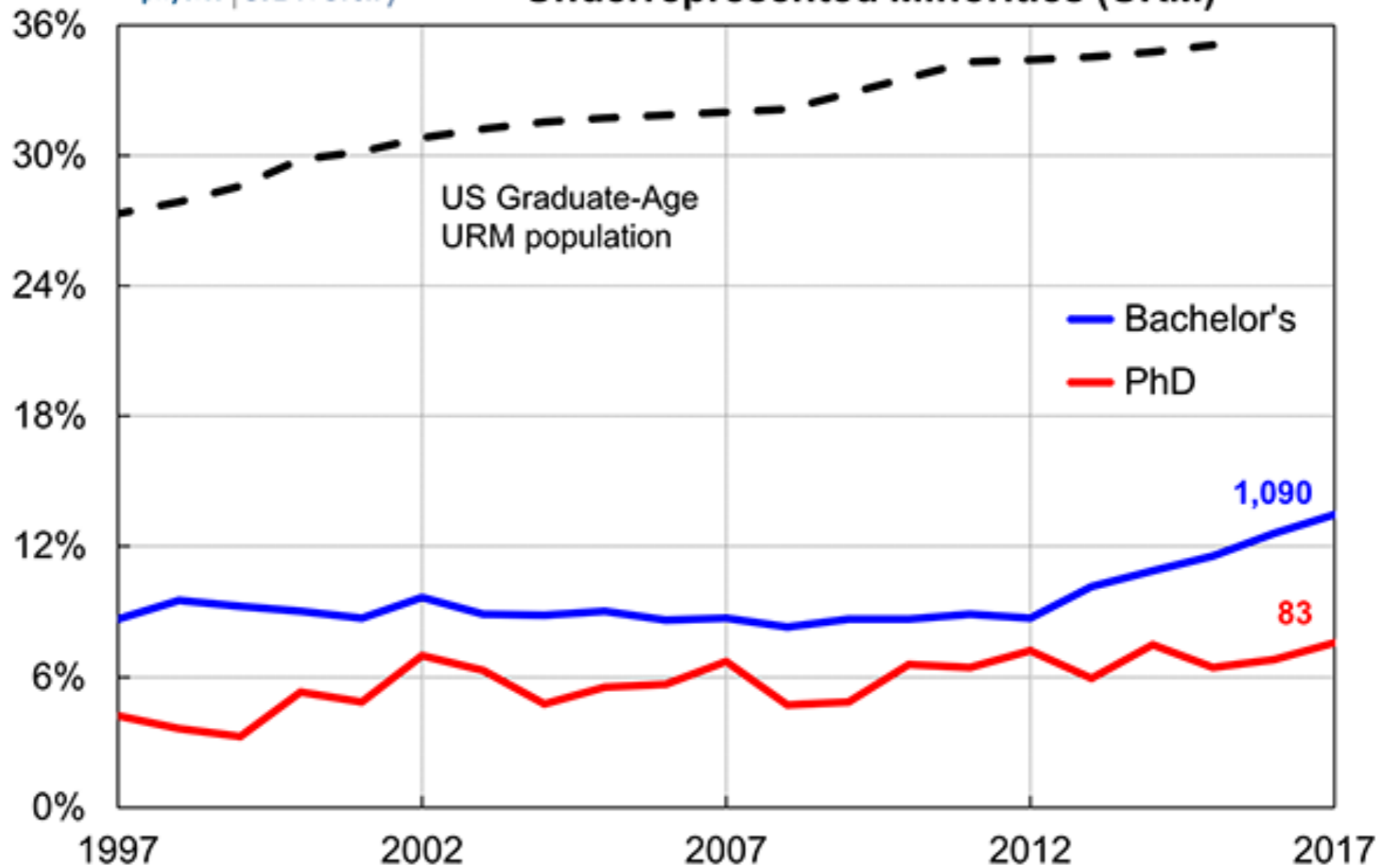
This graph shows the percentage of U.S. bachelor's degrees awarded to African Americans in Science, Technology, Engineering, and Mathematics (STEM) fields, as well as the percentage of college-age Black, Non-Hispanics in the U.S. population over roughly the same period.

Bachelor's Degrees Earned by Hispanic Americans



This graph shows the percentage of U.S. bachelor's degrees awarded to Hispanic Americans in Science, Technology, Engineering, and Mathematics (STEM) fields, as well as the percentage of college-age Hispanic Americans in the U.S. population roughly over the same period.

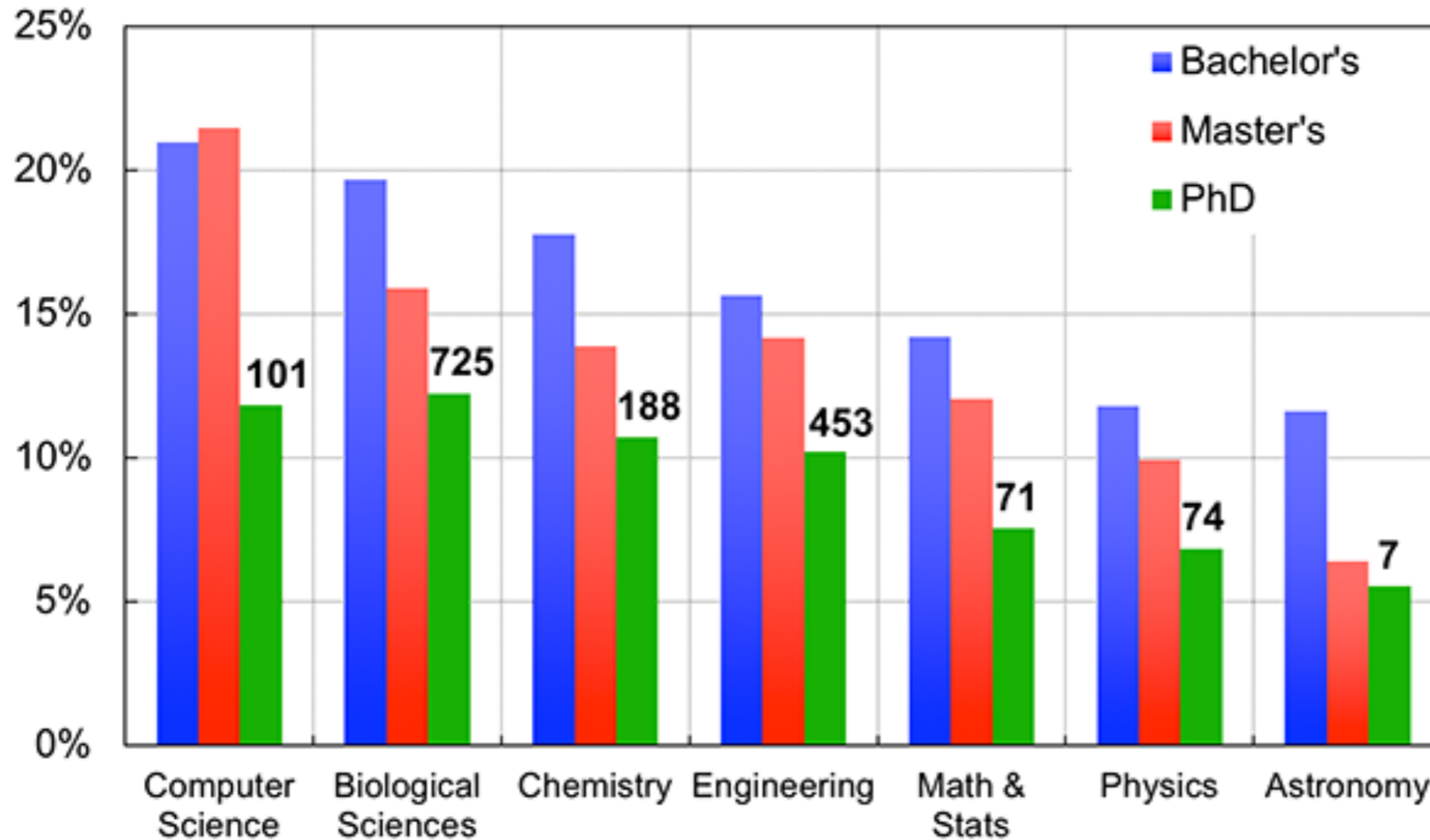
Physics Degrees Earned by Underrepresented Minorities (URM)



Source: IPEDS, US Census, and APS

This graph illustrates the percentage of physics bachelor's and doctoral degrees earned by underrepresented racial and ethnic minorities (URMs), normalized to their population in the U.S. In this case, URMs include African Americans, Hispanic Americans, American Indian/Alaska Natives and Native Hawaiians.

Degrees to Underrepresented Minorities (5-yr average 2013-2017)

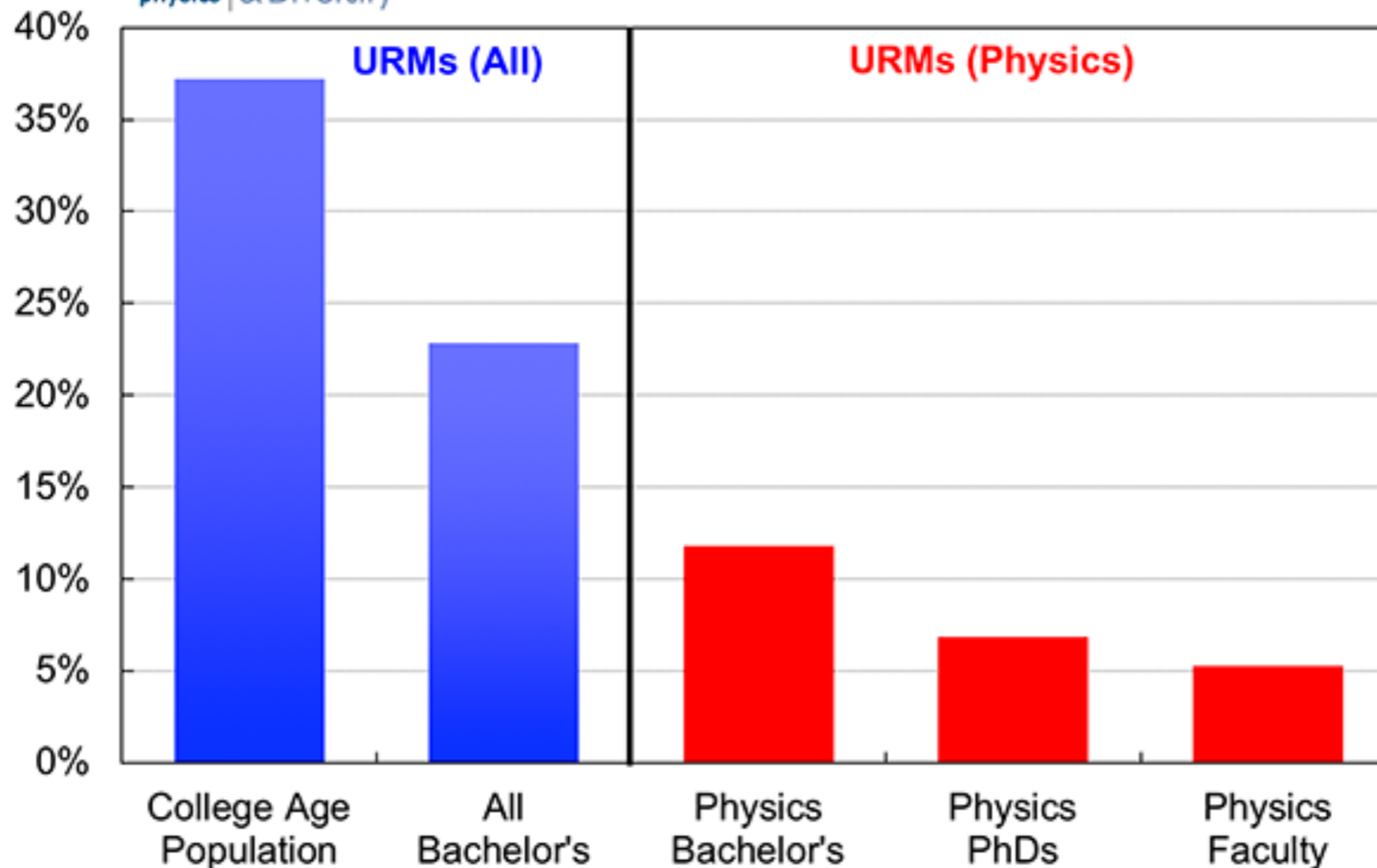


Source: IPEDS and APS

This graph shows the percentage of degrees in various fields earned by underrepresented ethnic and racial minorities (URMs) at U.S. institutions. In this case, URMs include African Americans, Hispanic Americans, American Indian/Alaska Natives and Native Hawaiians. Degrees awarded to temporary residents are not included in the calculations.

The data represent a 5-year average for the bachelor's, master's, and doctoral degrees for the five most recent years that data are available.

Retention of Underrepresented Minorities (URMs)

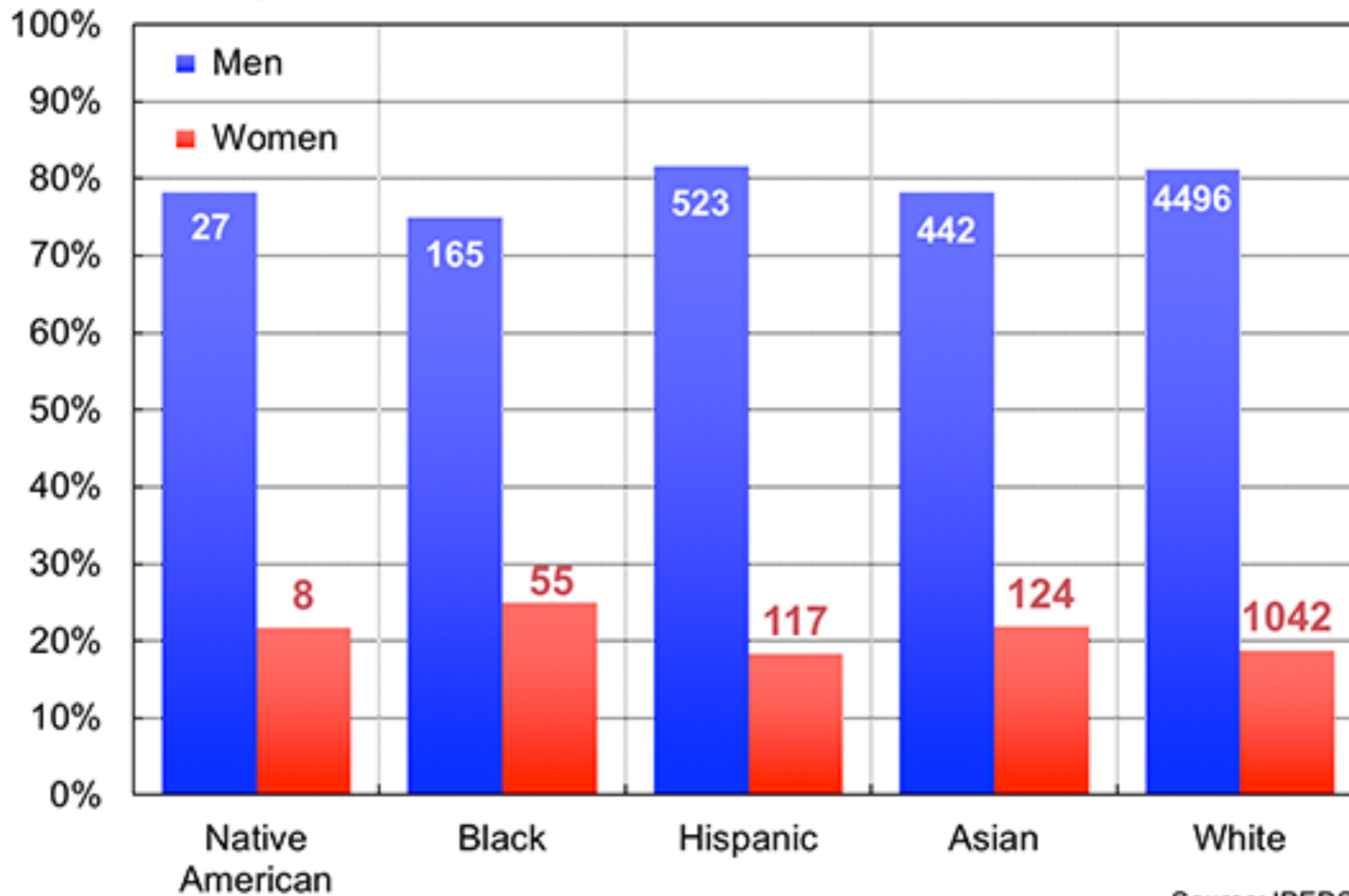


Source: US Census, IPEDS, AIP, and APS

This graph shows the percentage of underrepresented racial and ethnic minorities (URMs) in physics compared to both the percentage of URMs in the U.S. college age population and among all bachelor's degrees awarded. In this case, URMs include African Americans, Hispanic Americans, American Indian/Alaska Natives and Native Hawaiians. Degrees awarded to temporary residents are not included in the calculations.

- Bachelor's and doctoral degree data are averages of the five most recent years that data are available from IPEDS.
- Data on physics faculty are from the American Institute of Physics Statistical Research Center.
- Data on the college age population are collected for 2015 from the U.S. Census.

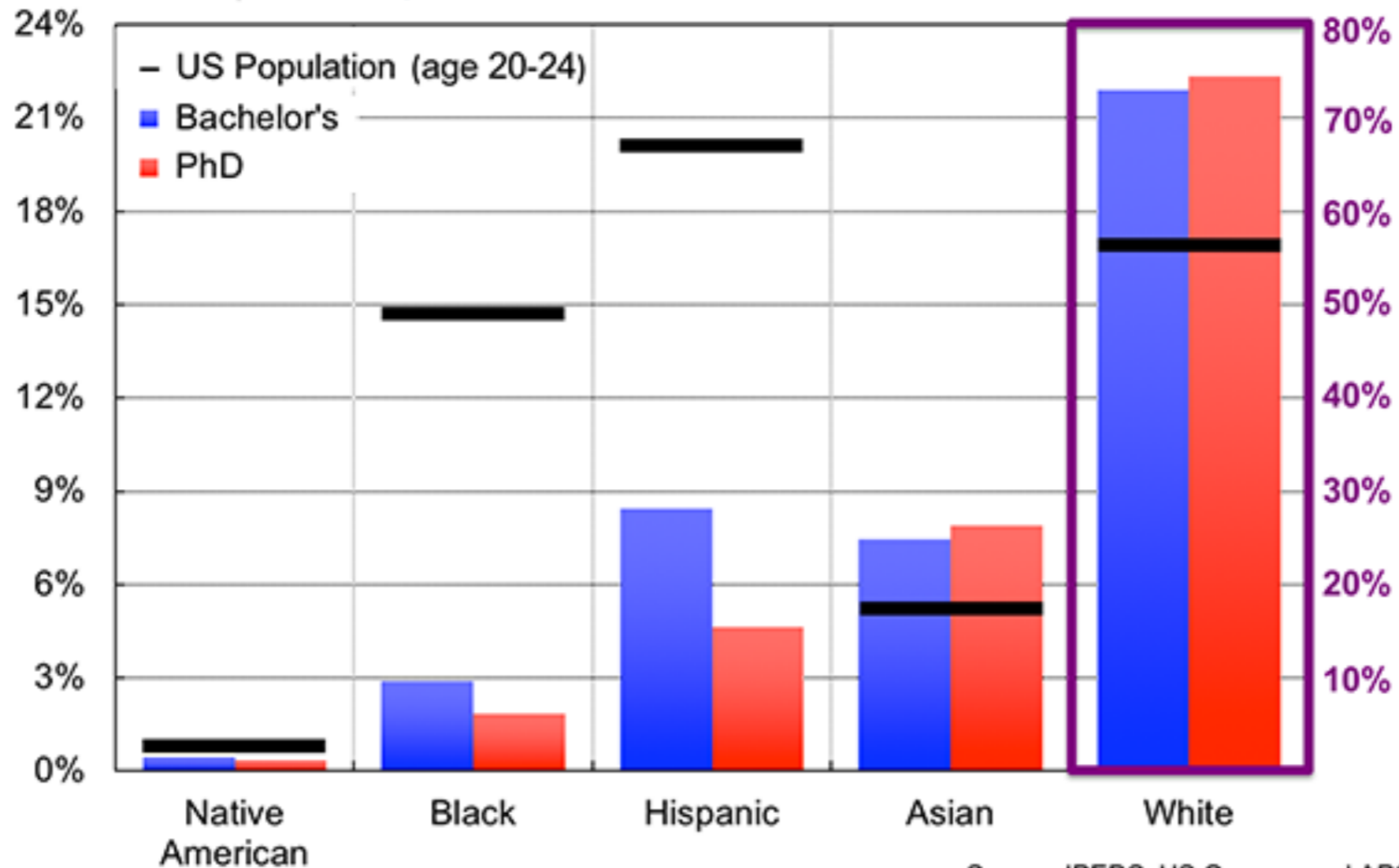
Bachelor's Degrees (5-yr avg 2013-2017)



Source: IPEDS and APS

This graph shows the percentage of physics bachelor's degrees granted to men and women of various races/ethnicities. The data do not include temporary residents.

Physics Degrees (5-yr avg 2013-2017)

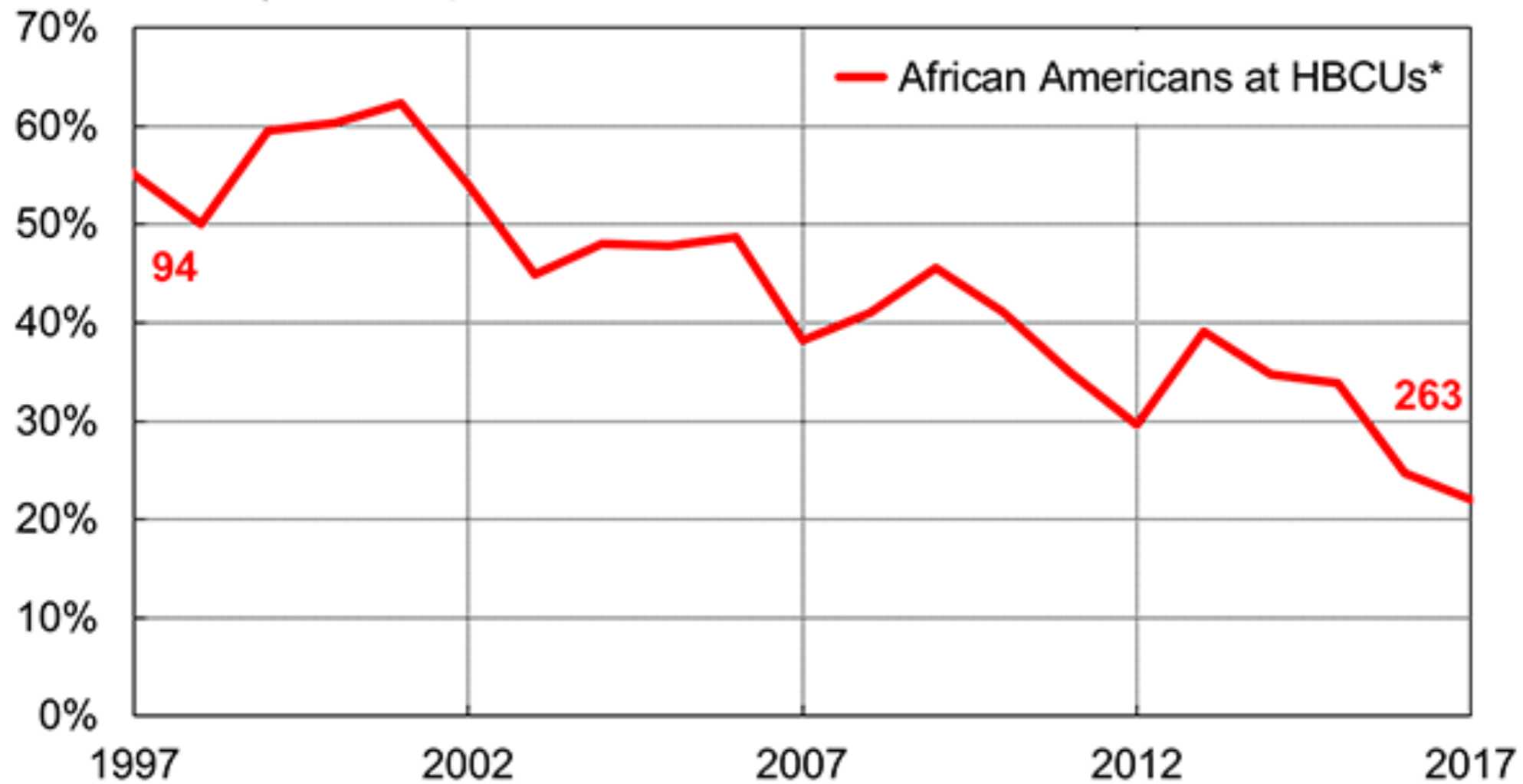


Source: IPEDS, US Census, and APS

This graph illustrates the percentage of physics bachelor's and doctoral degrees awarded to various races/ethnicities.

- The degree data are an average of five years (2013-2017) and are collected from the IPEDS Completion Survey by Race.
- The White/Caucasian data are represented on a secondary axis.
- The percentage of college age students (20-24 year olds) in each ethnicity is represented by the black lines on each column and are collected from the U.S. Census.

Bachelor's Degrees Awarded at HBCUs*



* HBCUs = Historically Black Colleges and Universities

Source: IPEDS and APS

This graph shows the percentage of physics bachelor's degrees awarded to African Americans at Historically Black Colleges and Universities (HBCUs).

2017 Physics Degree-Granting Minority-Serving Institutions

Below, you can find a list of all Minority-Serving Institutions (MSIs) in the U.S that provided physics degrees for 2017. More information on Historically Black Colleges and Universities (HBCUs), including those that do not grant physics degrees, can be found [here](#). Black-Serving Institutions (BSIs) and Hispanic-Serving Institutions (HSIs) are defined as institutions that have a fall student enrollment of at least 25% for those respective races/ethnicities.

Historically Black Colleges and Universities (HBCUs):

21 institutions

Alabama A & M University	Morgan State University
Benedict College	Norfolk State University
Delaware State University	North Carolina A & T State University
Dillard University	North Carolina Central University
Elizabeth City State University	South Carolina State University
Fisk University	Tougaloo College
Hampton University	Tuskegee University
Howard University	University of the District of Columbia
Jackson State University	Virginia Union University
Lincoln University	Xavier University of Louisiana
Morehouse College	

Black-Serving Institutions (BSIs), excluding HBCUs:

23 institutions

Agnes Scott College	Old Dominion University
Armstrong State University	Southern Arkansas University Main Campus
Chicago State University	SUNY Buffalo State
Christian Brothers University	Troy University
CUNY Lehman College	University of Alabama at Birmingham
CUNY York College	University of Memphis
Francis Marion University	University of North Carolina at Greensboro
Frostburg State University	University of North Carolina at Pembroke
Georgia Southern University	University of Southern Mississippi
Georgia State University	University of West Georgia
Lamar University	Valdosta State University
Notre Dame of Maryland University	

2017 Physics Degree-Granting Minority-Serving Institutions

Hispanic-Serving Institutions (HSIs):

64 institutions

Angelo State University	Northeastern Illinois University
California Lutheran University	Saint Mary's College of California
California State Polytechnic University-Pomona	Saint Peter's University
California State University-Bakersfield	San Diego State University
California State University-Channel Islands	San Francisco State University
California State University-Chico	San Jose State University
California State University-Dominguez Hills	Sonoma State University
California State University-East Bay	St. Mary's University
California State University-Fresno	Texas Lutheran University
California State University-Fullerton	Texas State University
California State University-Long Beach	The University of Texas at Arlington
California State University-Los Angeles	The University of Texas at El Paso
California State University-Northridge	The University of Texas at San Antonio
California State University-Sacramento	The University of Texas Rio Grande Valley
California State University-San Bernardino	University of Arizona
California State University-San Marcos	University of California-Irvine
California State University-Stanislaus	University of California-Merced
College of Staten Island CUNY	University of California-Riverside
CUNY City College	University of California-Santa Barbara
CUNY Hunter College	University of California-Santa Cruz
CUNY Lehman College	University of Central Florida
CUNY Queens College	University of Houston
CUNY York College	University of Houston-Clear Lake
Florida Atlantic University	University of Illinois at Chicago
Florida International University	University of La Verne
Houston Baptist University	University of Nevada-Las Vegas
Humboldt State University	University of New Mexico-Main Campus
McMurry University	University of Puerto Rico-Humacao
Montclair State University	University of Puerto Rico-Mayaguez
New Mexico Institute of Mining and Technology	University of Puerto Rico-Rio Piedras
New Mexico State University-Main Campus	University of Redlands
	West Texas A & M University
	Whittier College