



SIAM ANNUAL BUSINESS MEETING July 2017

Nick Higham
SIAM President

Jim Crowley
Executive Director

Meet Your Officers

President: Nicholas Higham, University of Manchester

Secretary: Simon J. Tavener, Colorado State University

VP at Large: Ilse Ipsen, North Carolina State University

Treasurer: Samuel Gubins, Annual Reviews

VP for Publications: Michael J. Miksis, Northwestern University

VP for Programs : Cynthia Phillips, Sandia National Laboratories

VP for Science Policy: C. David Levermore, University of Maryland

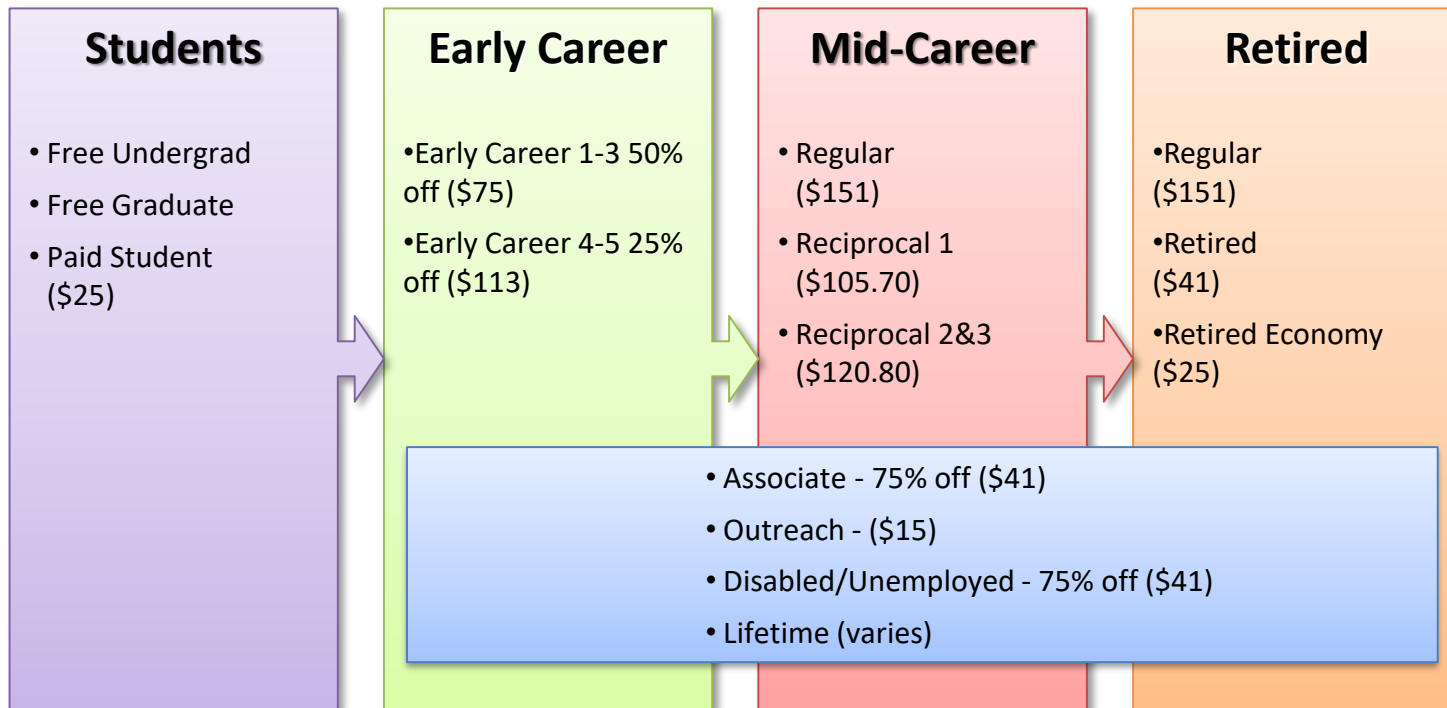
VP for Education: Rachel Levy, Harvey Mudd College

VP for Industry: Thomas A. Grandine, Boeing Company

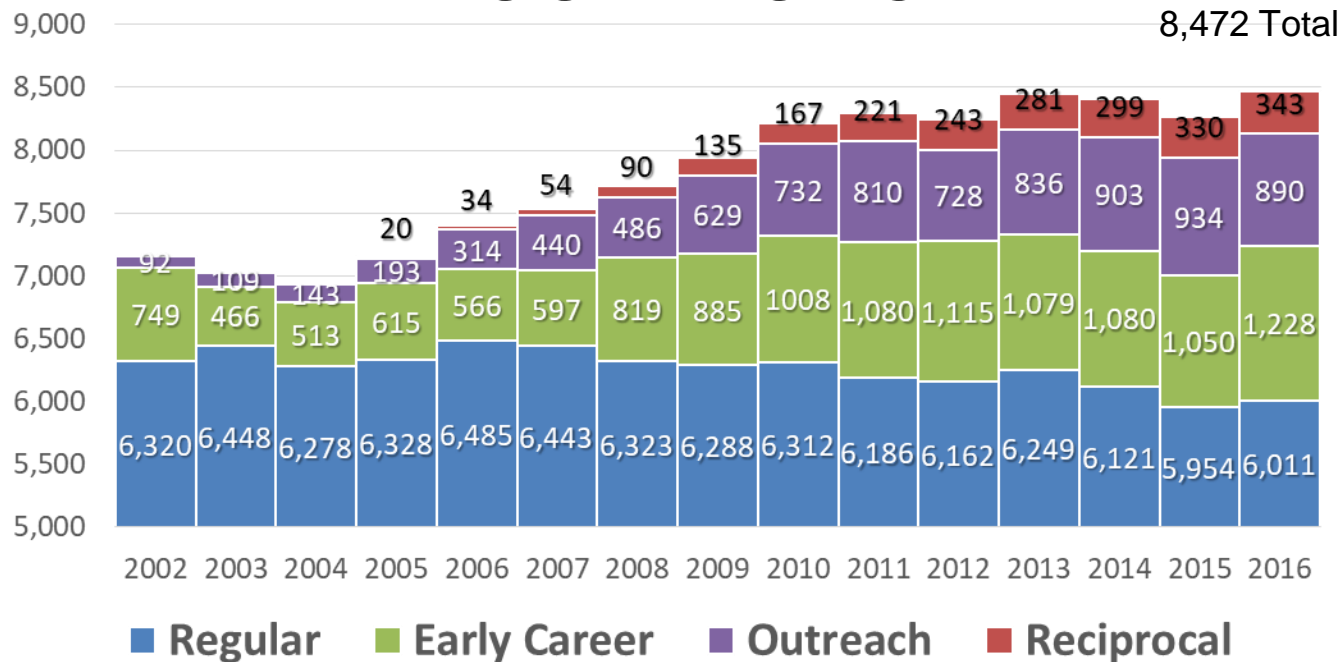
SIAM Membership Update

Data as of 12/31/2016

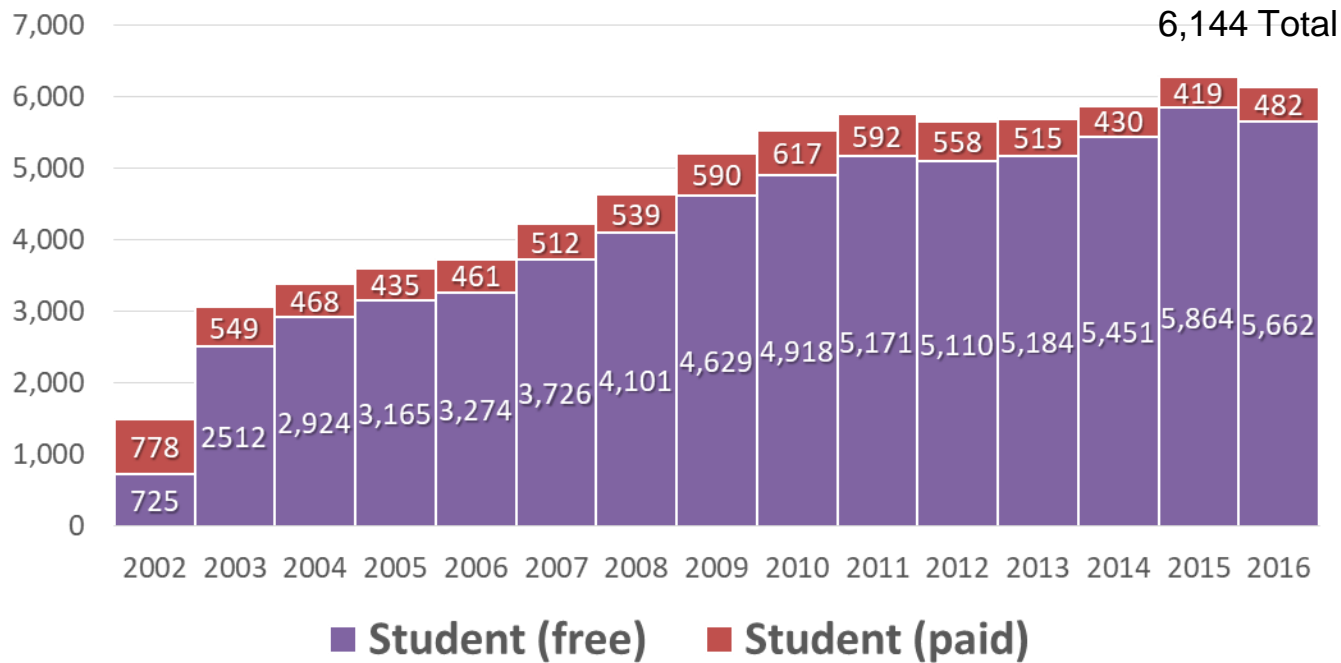
Member Lifespan – Member Types



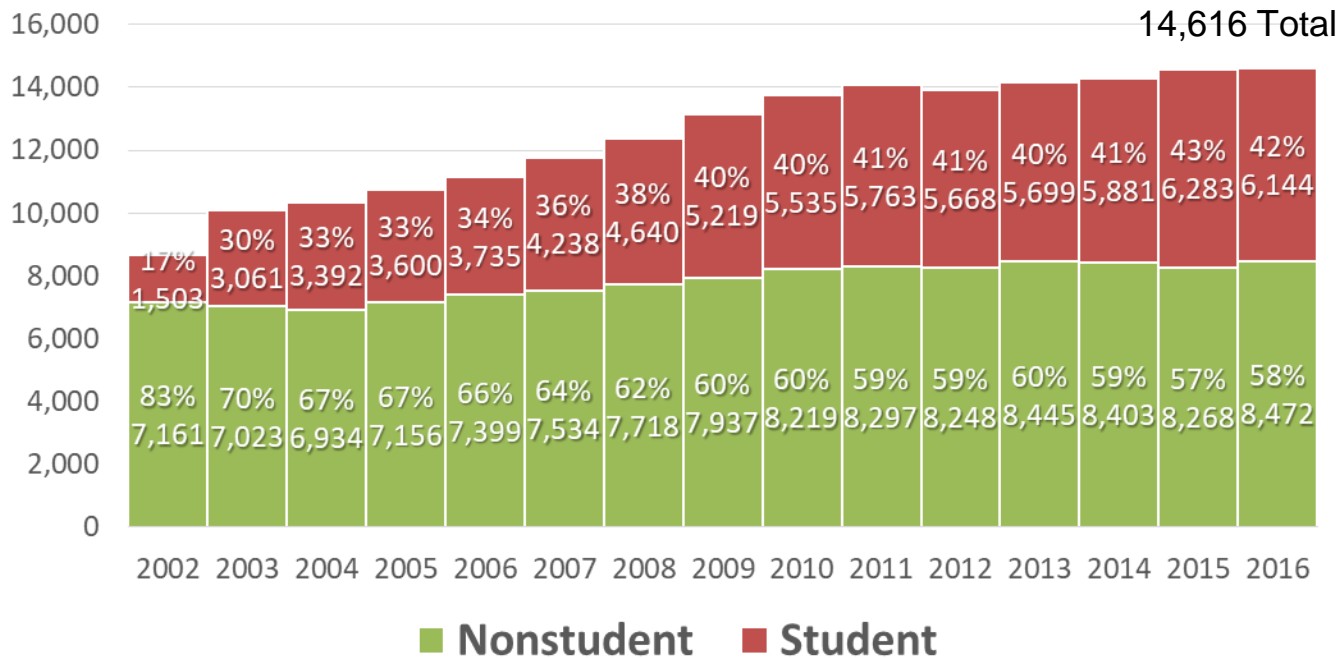
Nonstudent Members: 2002-2016



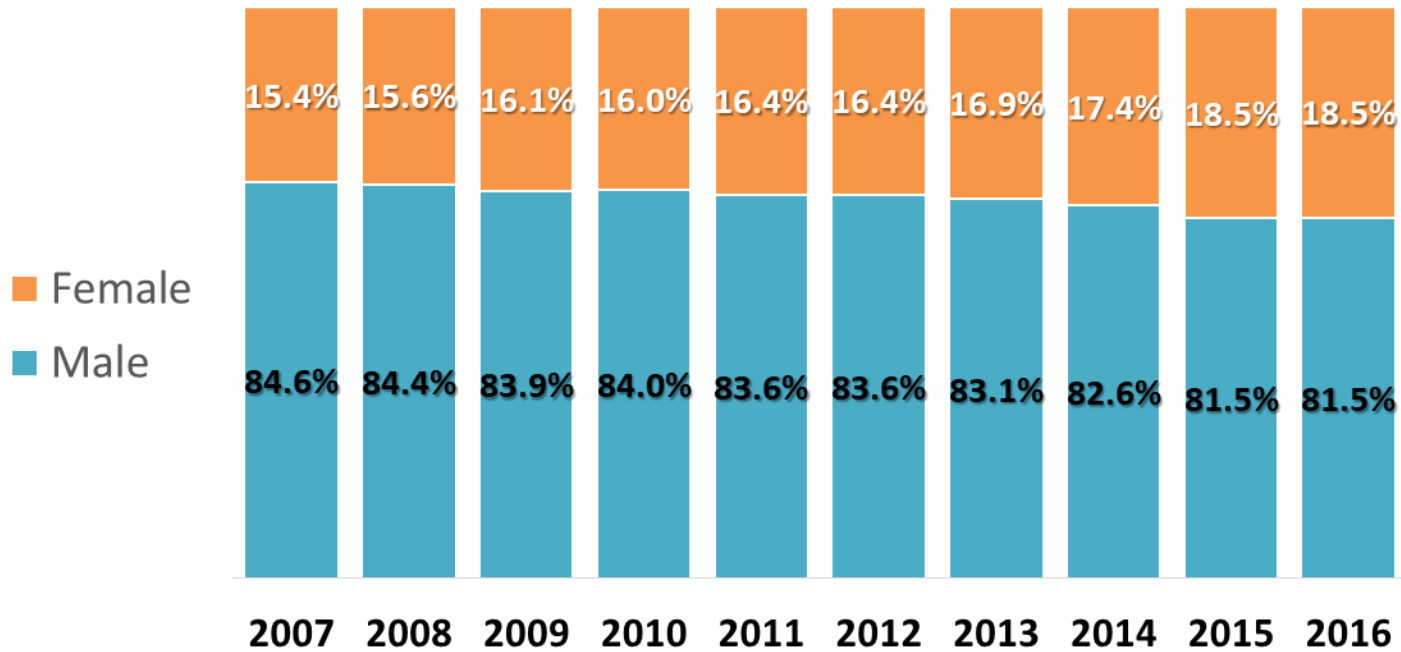
Student Members: 2002-2016



Student vs Nonstudent Members: 2002-2016

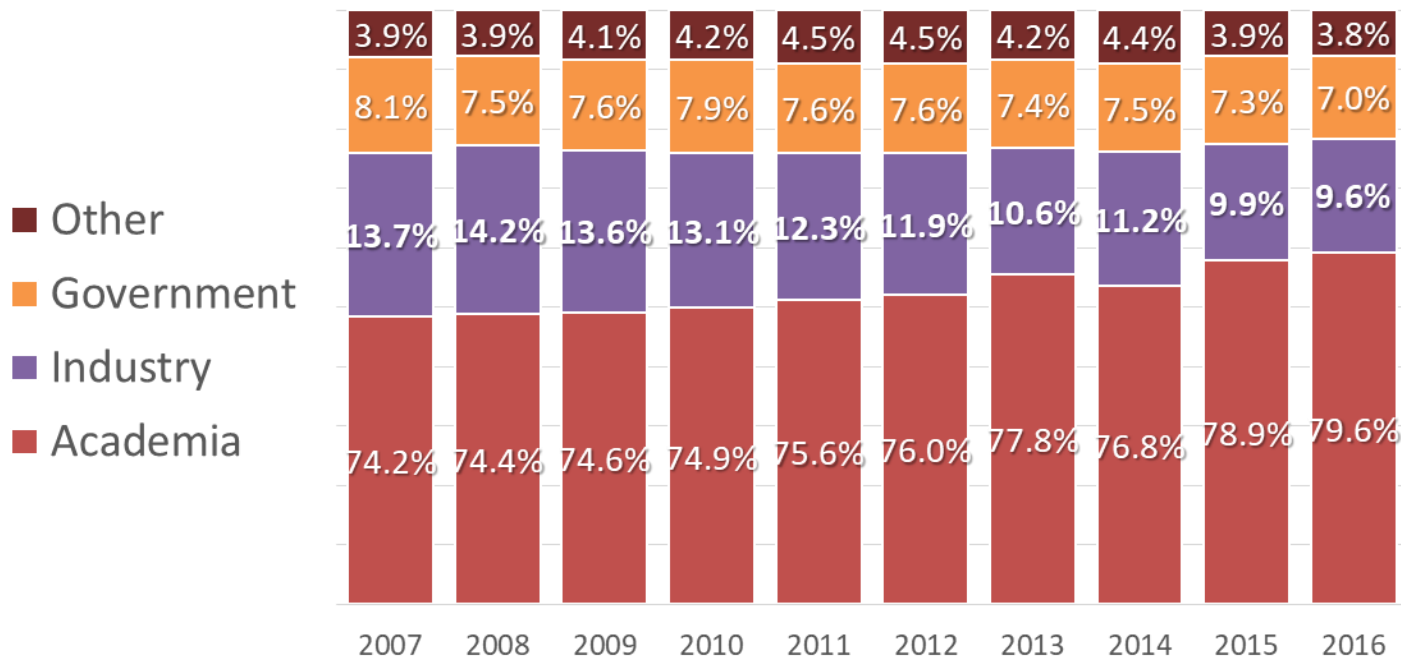


Members by Gender: 2007-2016



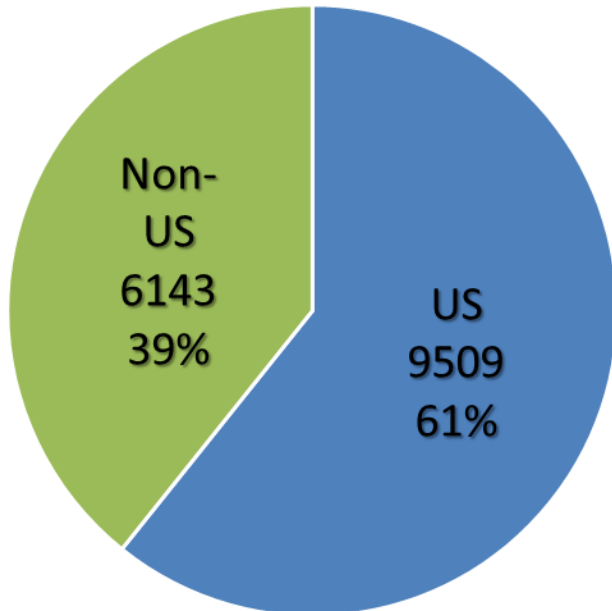
Members by Affiliation:

2007-2016

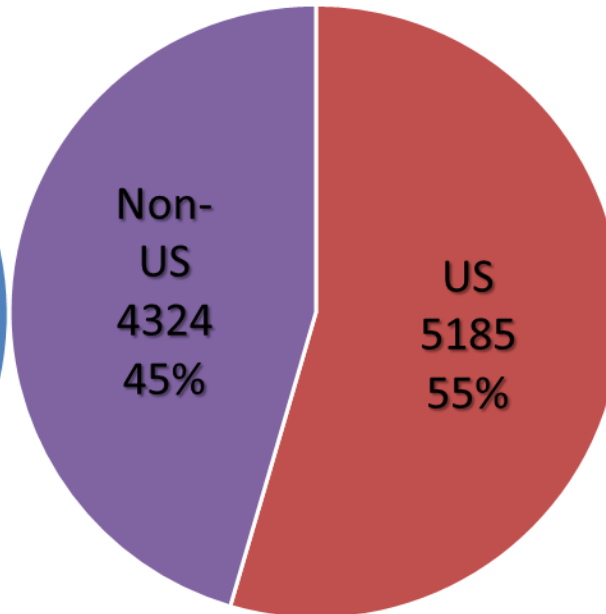


Members by Country

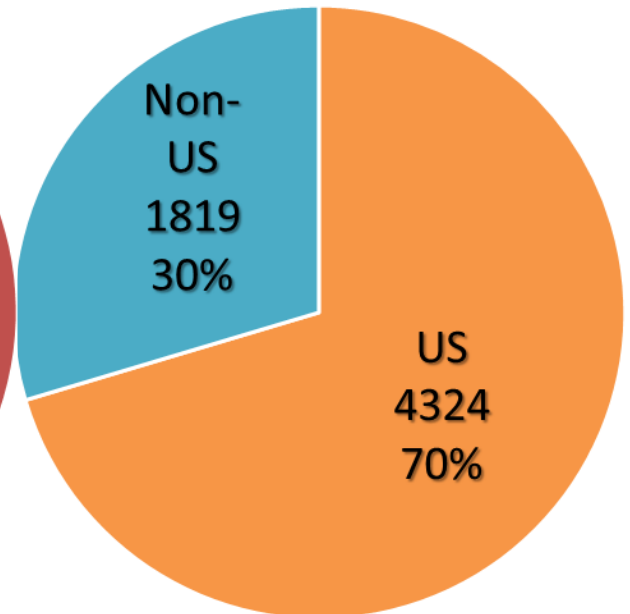
Overall



Non-Students

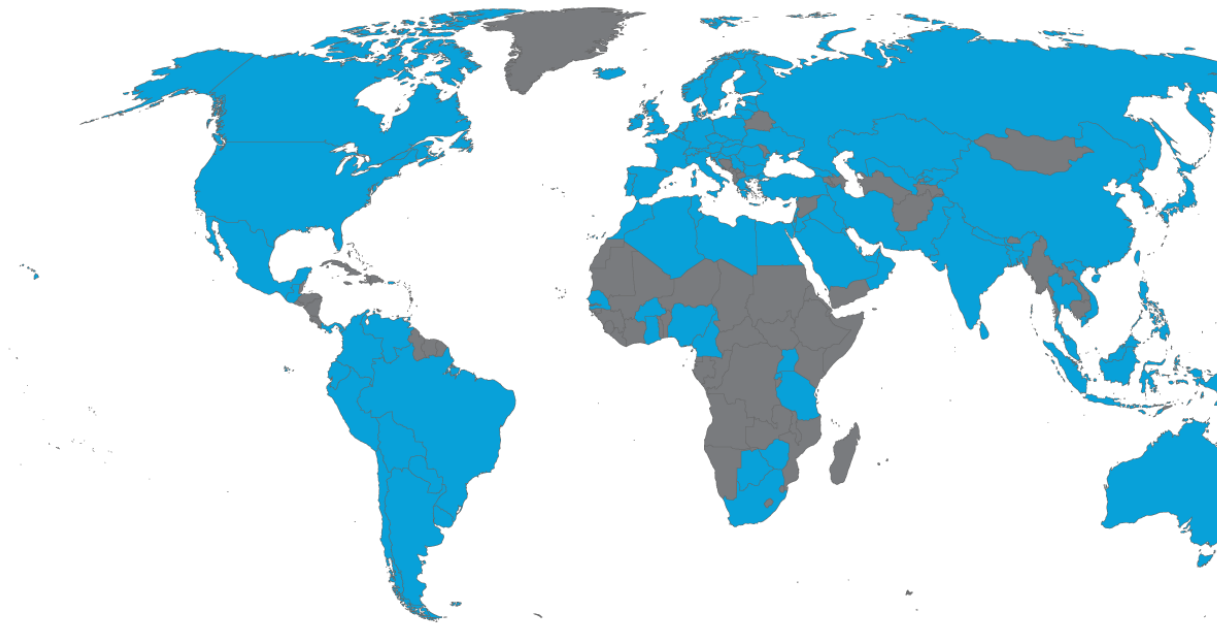


Students



Members by Country

103 Countries

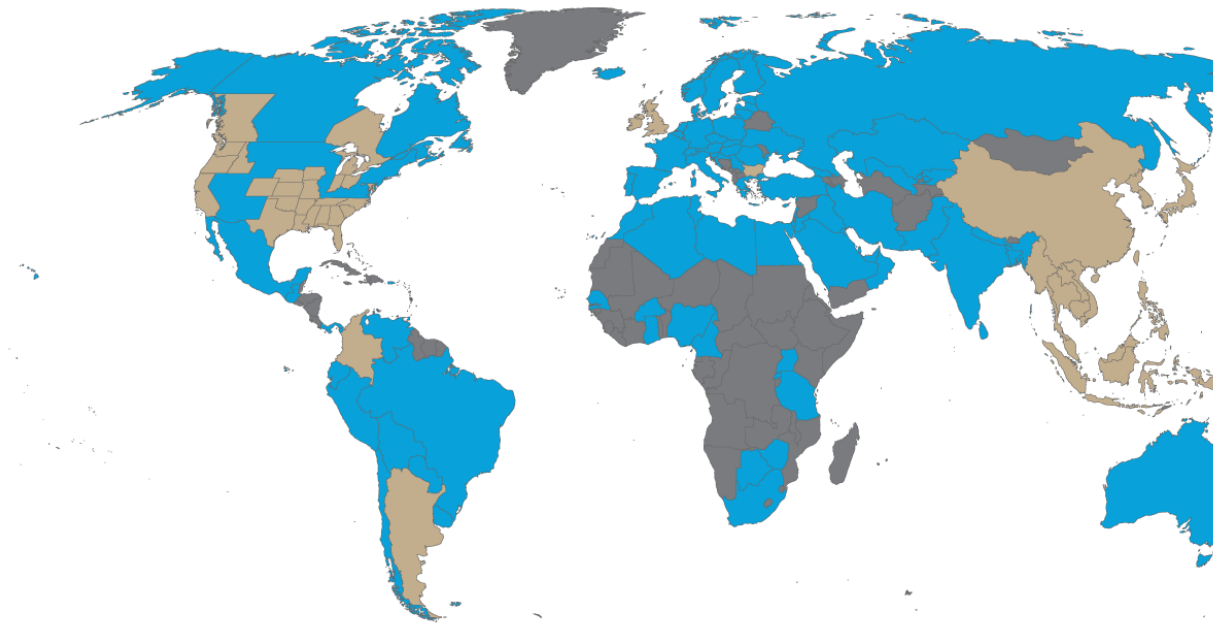


Top 10 By Total Members

| | |
|-------------|-------|
| USA | 9,509 |
| UK | 571 |
| Canada | 486 |
| Germany | 481 |
| China | 356 |
| India | 355 |
| Japan | 226 |
| Italy | 169 |
| France | 139 |
| Switzerland | 134 |

Regional Sections

7 USA, 5 Outside USA



Section List

Central States

Great Lakes

Pacific Northwest

Southeastern Atlantic

Southern California

Texas-Louisiana

Washington-Baltimore

Argentinian

Bulgaria

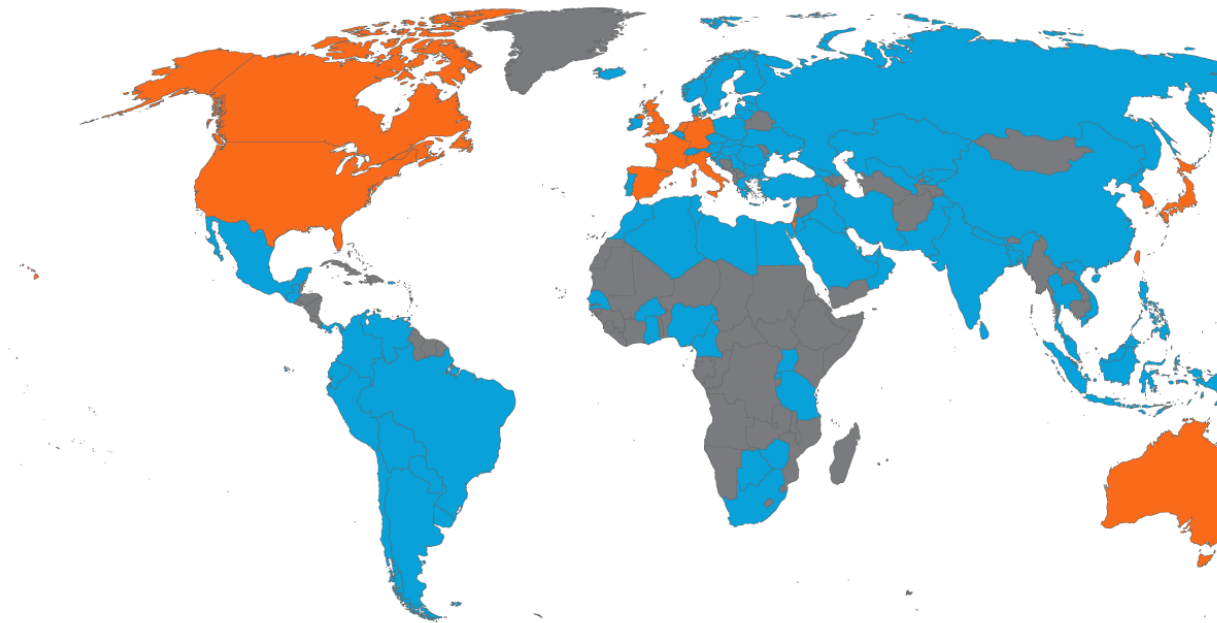
Colombia

East Asia

United Kingdom & Rep of Ireland

Reciprocal Members

15 Organizations



Reciprocal Societies List

AustMS (Australia)

CAIMS (Canada)

EMS (Scotland/UK)

GAMM (Germany)

IMA (UK)

IMU (Israel)

JSIAM (Japan)

KSIAM (S. Korea)

KWG (Netherlands)

SMS (Singapore)

SEMA (Spain)

SIMAI (Italy)

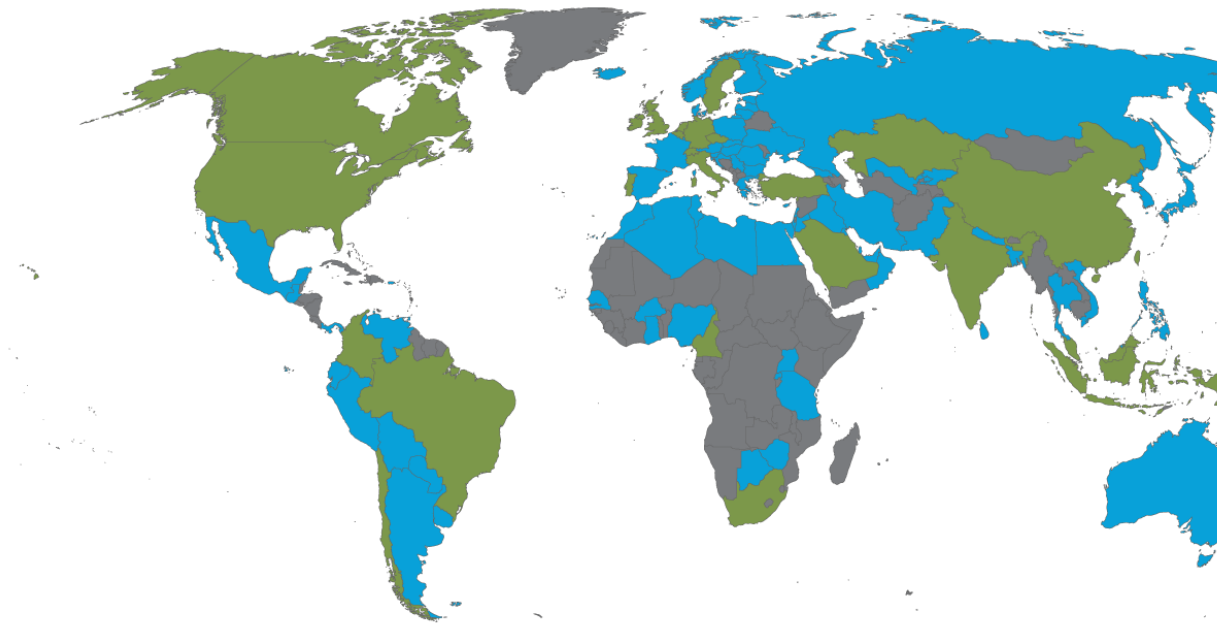
SMAI (France)

TWSIAM (Taiwan)

AWM (USA)

Student Chapters

177 Total Active – 122 US, 55 Foreign in 25 Countries



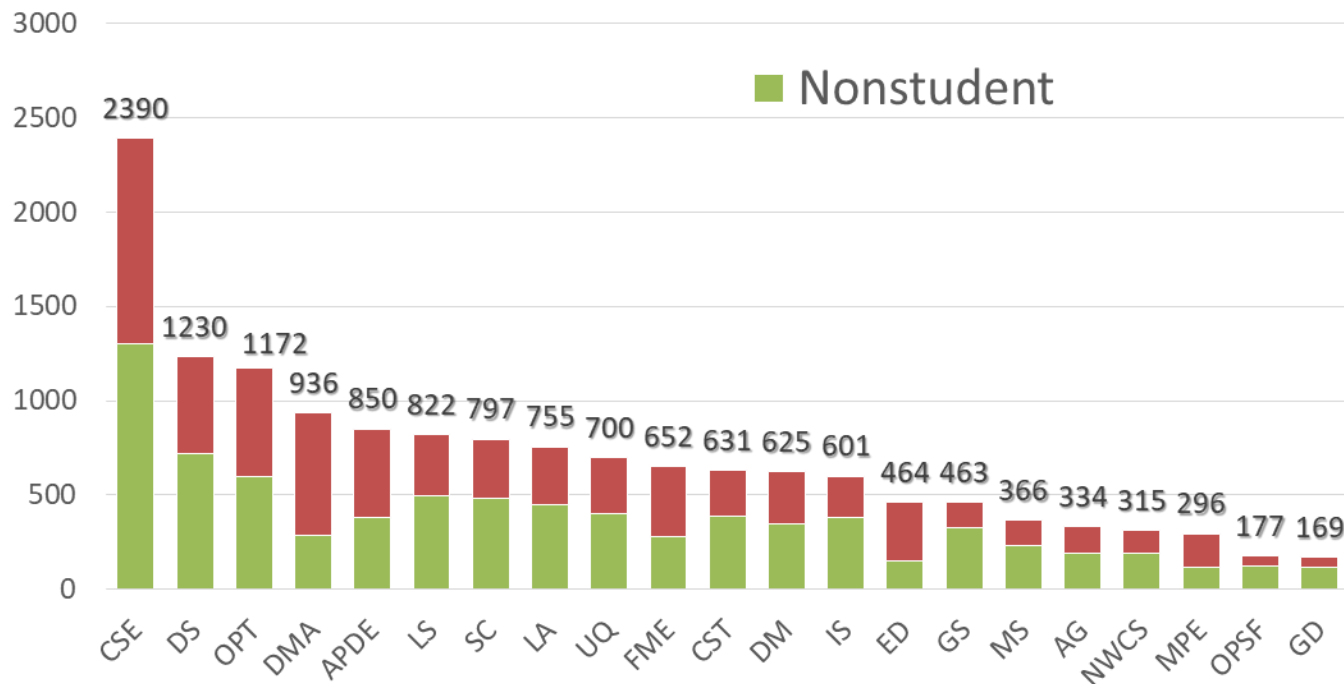
| Chapters by Country | |
|---|-----|
| USA | 122 |
| UK | 10 |
| Germany | 6 |
| Canada & India | 5 |
| Taiwan | 3 |
| Chile, China, Ireland, Italy, Netherlands, South Africa | 2 |
| Belgium, Brazil, Cameroon, Colombia, Czech Republic, Hong Kong, Indonesia, Kazakhstan, Malaysia, Saudi Arabia, Singapore, Sweden, Switzerland, Turkey | 1 |

ACTIVITY GROUPS – THE HEART OF SIAM

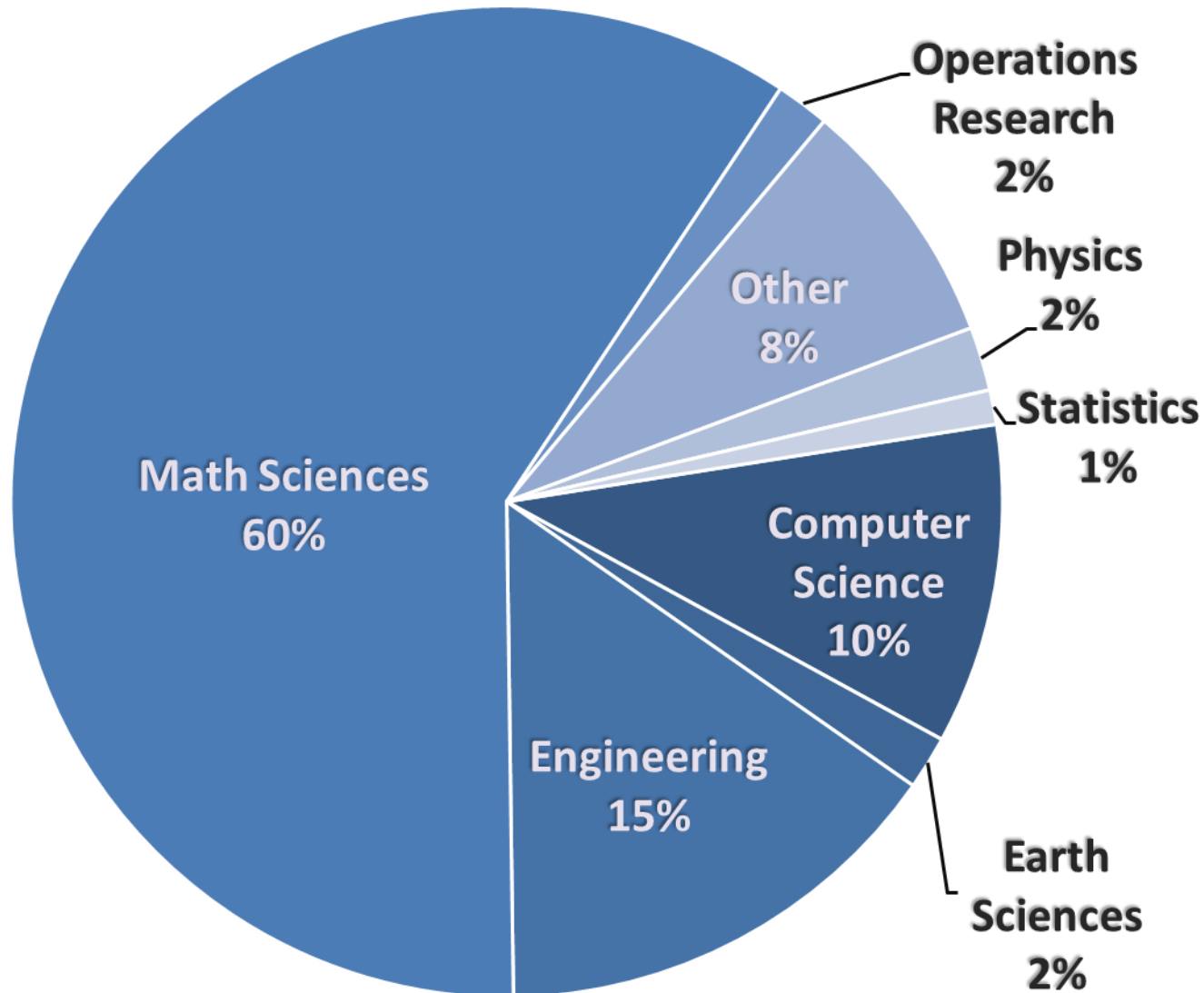
| | |
|------|------|
| LA | 1982 |
| DMA | 1985 |
| SC | 1985 |
| Opt | 1986 |
| CST | 1987 |
| GD | 1989 |
| DS | 1990 |
| OPSF | 1990 |
| GS | 1992 |
| IS | 2000 |
| LS | 2000 |

| | |
|------|------|
| CS&E | 2001 |
| APDE | 2003 |
| FME | 2003 |
| NWCS | 2003 |
| MS | 2008 |
| AG | 2010 |
| DMA | 2011 |
| UQ | 2011 |
| AME | 2016 |
| MPE | 2016 |

Activity Group Membership



Department (excluding students)



SIAM STUDENT CHAPTERS

- **FUNDING** – Receive up to \$500 each per year **plus** travel for one to AN
- **INTERACTION** – Students representing chapters meet with SIAM leadership at AN
- **ACTIVITIES**

Student Travel Awards

- Provides travel support for approximately 315 students to attend SIAM conferences
- Funding by NSF, various companies, and SIAM (\$200,000), book authors, and donors for a total of about \$240,000 per year.

Student Travel Fund (STF) / Student Travel Awards (STAs)

- \$200,000 allocated by SIAM Board for STF
- STF provided funding for 310 students to travel to a SIAM conference in 2016
 - Includes additional \$40,000 funding from individual donors, book authors, and corporate sponsors
- Additional 32 students funded through support from the NSF.

*We thank SIAM members and book authors for their
generous donations!*

See *Donate* button at top of www.siam.org

SIAM Fellows

- A total of 451 SIAM Fellows since the inception of the program in 2009.
- 28 new SIAM Fellows elected in 2017.

Fellows Demographics:

All Fellows vs. Class of 2017

| | SIAM Members* | % SIAM Members* | All Fellows | % All Fellows | 2017 Fellows | % 2017 Fellows |
|-----------------|--------------------------|----------------------------|--------------------|----------------------|---------------------|---------------------------|
| Total | | | 451 | | 28 | |
| US | 5179 | 61.0% | 338 | 74.9% | 14 | 50.0% |
| Non-US | 3312 | 39.0% | 113 | 25.1% | 14 | 50.0% |
| Male | 6730 | 85.2% | 396 | 87.8% | 23 | 82.1% |
| Female | 1171 | 14.8% | 55 | 12.2% | 5 | 17.9% |
| Academic | 5086 | 81.1% | 391 | 86.7% | 23 | 82.1% |
| Industry | 600 | 9.6% | 29 | 6.4% | 0 | 0.0% |
| Govt/Lab | 438 | 7.0% | 30 | 6.7% | 5 | 17.86% |
| Other | 146 | 2.3% | 1 | 0.2% | 0 | 0.0% |

*Comprises available demographic data for nonstudent members as of December 31, 2016

Fellows Demographics:

All nominations vs. Class of 2017 nominations

| | SIAM Members* | % SIAM Members* | All nominees | % All nominees | 2016 nominees | % 2016 nominees |
|-----------------|---------------|-----------------|--------------|----------------|---------------|-----------------|
| Total | | | 526 | | 56 | |
| US | 5179 | 61.0% | 399 | 75.86% | 34 | 60.7% |
| Non-US | 3312 | 39.0% | 127 | 24.1% | 22 | 39.3% |
| Male | 6730 | 85.2% | 459 | 87.3% | 46 | 82.1% |
| Female | 1171 | 14.8% | 67 | 12.7% | 10 | 17.9% |
| Academic | 5086 | 81.1% | 451 | 85.7% | 50 | 89.3% |
| Industry | 600 | 9.6% | 22 | 4.2% | 0 | 0.0% |
| Govt/Lab | 438 | 7.0% | 49 | 9.3% | 6 | 10.7% |
| Other | 146 | 2.3% | 4 | 0.8% | 0 | 0.0% |

*Comprises available demographic data for nonstudent members as of December 31, 2016

Know Any Stellar Mathematicians?
CALL FOR PRIZE NOMINATIONS

Open May 1

The SIAM Prize Program provides an opportunity to honor members of our community, spanning from lifetime contributions to student and early career recognition. SIAM values a wide range of participants in all its activities and seeks diversity among prize nominees.

53 Major, Activity Group, & Joint Prizes Awarded

- 131 Nominations Received in 2016

2018 SIAM Prize Season Features:

- AWM-SIAM Sonia Kovalevsky Prize
- The John von Neumann Lecture
- Julian Cole Lectureship
- Richard C. DiPrima Prize
- George Pólya Prize in Mathematics
- W. T. and Idalia Reid Prize
- SIAM Outstanding Paper Prizes
- SIAM Student Paper Prizes

Submit your nomination now!

www.siam.org/prizes

SIAM Prizes

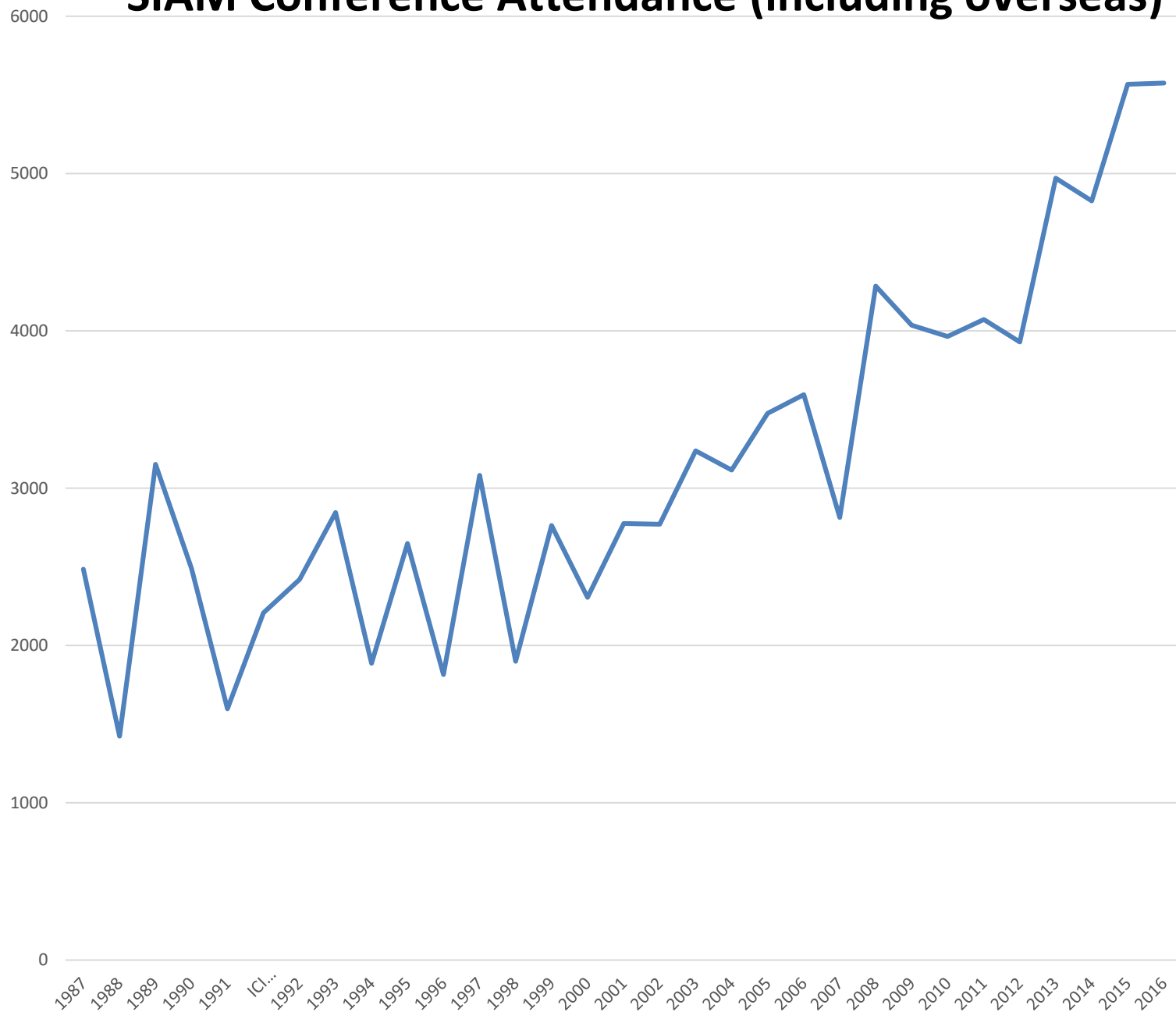
- **Nominations needed**, especially:
 - women, people in industry, and other under-represented groups.
- See <http://www.siam.org/prizes/nominations.php> for open calls
- John von Neumann, Kovalevsky, Cole, DiPrima, Polya, and Reid prizes are all open for nominations.

SIAM Conferences and Workshops

SIAM Conferences

- 2016 was successful for SIAM conferences with about 4,275 paid attendees at 8 SIAM conferences.
- Nearly 1,600 attended AN16/LS16 in Boston
- Nearly 5,500 total attendees, including UQ16 (Lausanne) and PP16 (Paris).
- Increasing trend towards conferences outside U.S. with 3 in 2018.

SIAM Conference Attendance (including overseas)



Conferences

Other items of note:

- **ICIAM 2019 will be held in Valencia**, Spain
Monday, 15 July, 2019 to Friday, 19 July, 2019
 - SIAM Activity Groups and SIAM members encouraged to participate
- **No SIAM Annual Meeting that year**

See <http://iciam2019.org/>

SIAM Publications

- The SIAM Journal on Uncertainty Quantification (UQ) was launched in 2013; SIAM Journal on Algebraic Geometry in 2016
- Supplementary Materials now part of most SIAM journals

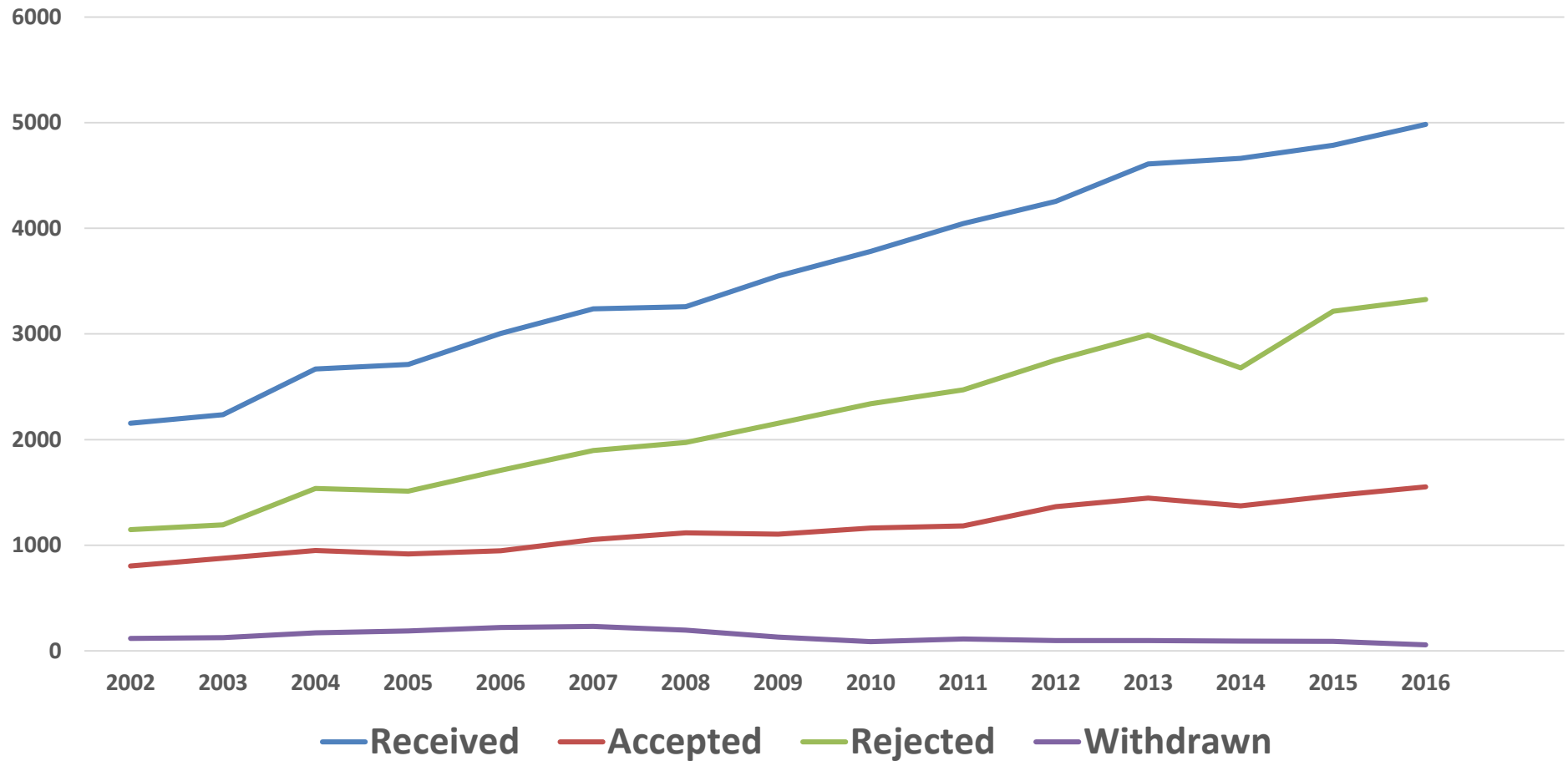
SIAM Journals Online



SIAM Journals

| | | |
|--------|------|------------------------------|
| SIAP | 1953 | Applied Math |
| SICON | 1960 | Control |
| SINUM | 1964 | Numerical Analysis |
| SICOMP | 1970 | Computing |
| SIMA | 1970 | Analysis |
| SIDMA | 1980 | Discrete Math |
| SIMAX | 1980 | Linear Algebra |
| SISC | 1980 | Scientific Computing |
| SIOPT | 1990 | Optimization |
| SIADS | 2002 | Dynamical Systems |
| MMS | 2003 | Multiscale Modeling and Sim. |
| SIIMS | 2008 | Imaging |
| SIFIN | 2010 | Financial Mathematics |
| JUQ | 2013 | Uncertainty Quantification |
| SIAGA | 2016 | Algebraic Geometry |

SIAM Journal Trends: # Papers



SIAM Publications

Conference Proceedings for the following ongoing conference series:

- SODA (Discrete Algorithms), ALENEX, ANALCO
- SIAM International Conference on Data Mining
- SIAM Conference on Control and its Applications

Peer reviewed and available at epubs.siam.org

SIAM Publications

Books

SIAM Publishes 18-24 books per year (mostly monographs), with serious review and copyediting services.

SIAM welcomes potential authors and suggestions for new topics



SIAM News

- Editorial Board under Hans Kaper, EIC
- New online format collects all new sources in one place; some features:
 - SIAM News Online.
 - Blog which includes brief news items, where readers can add comments.
 - Videos.
 - Social media sharing.

See <http://sinews.siam.org/>

Other Items of Interest

Committee on Science Policy (CSP)

- David Levermore is chair
- CSP meets twice in a year in DC
 - Meets with agency representatives
 - Goes to Capitol Hill to talk to Congressional committees, staff.
- Sign up for science policy mailing list at http://www.siam.org/about/science/sci_policy_form.php
- New Feature: **SIAM Policy Fellowships** for Early Career Members

SIAM Elections

- Nominating Committee chose slate for Fall 2017 Elections
- Nominating Committee members (2 ex officio, 2 appointed by Council and 2 appointed by Board):
 - Nick Higham (President)
 - Amr El-Bakry
 - Pam Cook (Past-President)
 - Sven Leyffer
 - Greg Forest
 - Anna Mazzucato

Election for Officers

- President-Elect:
 - [Tony Chan](#) (Hong Kong University of S&T)
 - [Lisa Fauci](#) (Tulane University)
- Vice President at Large:
 - [Ilse Ipsen*](#) (North Carolina State University)
 - [Carol Woodward](#) (Lawrence Livermore National Lab)
- Secretary
 - [Tom Grandine](#) (Boeing)
 - [Chen Greif](#) (University of British Columbia)

* Denotes incumbent

2016 Election Candidates

- Board: [Russell Caflisch](#)* (Courant Institute); [Charles Doering](#) (University of Michigan); [Tammy Kolda](#)* (Sandia National Lab); [Esmond Ng](#) (Lawrence Berkeley National Lab); [Helene Nussenzveig](#) (Federal University of Rio de Janeiro); [Henry Wolkowicz](#) (University of Waterloo)
- Council: [Suncica Canic](#) (University of Houston); [Hector Cenicerros](#) (University of California, Santa Barbara); [Raymond Chan](#)* (The Chinese University of Hong Kong); [Laura Grigori](#) (INRIA Paris); [Geoffrey McFadden](#)* (NIST); [Lois McInnes](#) (Argonne National Lab); [Michael Ng](#) (Hong Kong Baptist University); [Padma Raghavan](#)* (Vanderbilt University)

*Denotes incumbent

Appointments

- Committee on Committees and Appointments (Secretary Simon Tavener, chair) filling dozens of committee appointments.

Volunteer!

<http://bit.ly/SIAMvolunteer>

From: <http://www.siam.org/about/committees.php>

Additional news items

- SIAM is redoing web site (www.siam.org) – launch in late 2017. Our 17,000 pages will be moved to a mobile-friendly platform or archived for continued access.
- A new Conference Management System (CMS) is being developed. DM18 will be the first conference to use it.
- New SIAM Bookstore being developed. To appear in fall 2017.

SIAM Fellows

The New Class of 2016 SIAM Fellows

SIAM Fellows: Class of 2017 (1)

Zhaojun Bai (University of California, Davis)

Peter Benner (Max Planck Institute for Dynamics of Complex Technical Systems)

Angelika Bunse-Gerstner (Universität Bremen)

Emmanuel Candès (Stanford University)

Rama Cont (Imperial College London)

Ricardo Cortez (Tulane University)

Lieven De Lathauwer (KU Leuven)

Bart De Moor (KU Leuven)

Andreas Griewank (Yachay Tech University, School of Math Sciences and Info Tech)

Helge Holden (Norwegian University of Science and Technology)

Panayotis Kevrekidis (University of Massachusetts, Amherst)

Vipin Kumar (University of Minnesota)

Karl Kunisch (Karl Franzens Universität Graz)

Monique Laurent (Centrum Wiskunde & Informatica (CWI) and Tilburg University)

SIAM Fellows: Class of 2017 (2)

Mark A. Lewis (University of Alberta)

Lois Curfman McInnes (Argonne National Laboratory)

Igor Mezic (University of California, Santa Barbara)

Michael Kwok-Po Ng (Hong Kong Baptist University)

James Renegar (Cornell University)

Andrew J. Sommese (University of Notre Dame)

Joel H. Spencer (Courant Institute)

Gabor Stepan (Budapest University of Technology and Economics)

Daniel B. Szyld (Temple University)

Jean E. Taylor (Courant Institute and Professor Emerita at Rutgers)

Marc Teboulle (Tel Aviv University)

J. A.C. Weideman (Stellenbosch University)

Carol S. Woodward (Lawrence Livermore National Laboratory)

Kevin Zumbrun (Indiana University)

CONGRATULATIONS!
TO OUR NEWEST CLASS
OF SIAM FELLOWS