



**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

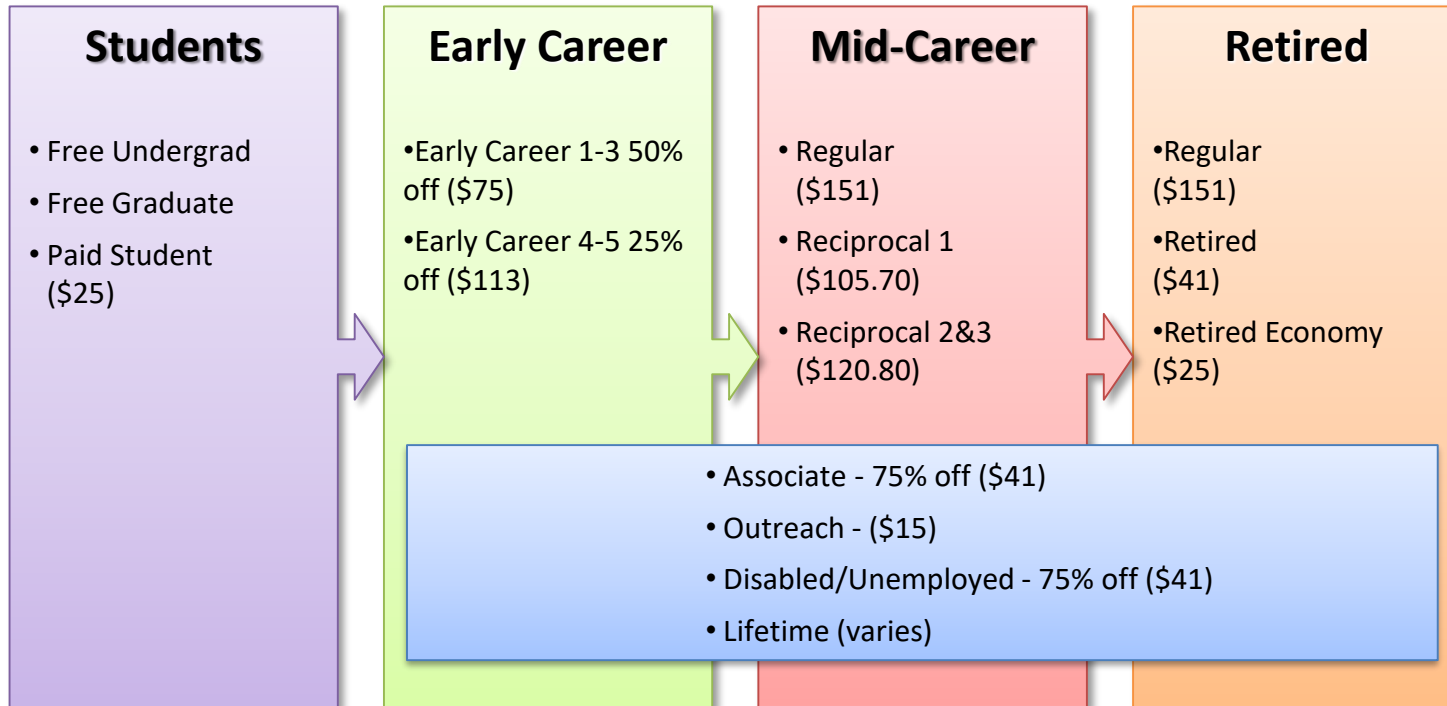
**VP for Education: Rachel Levy**, Harvey Mudd College

**VP for Industry: Thomas A. Grandine**, Boeing Company

# SIAM Membership Update

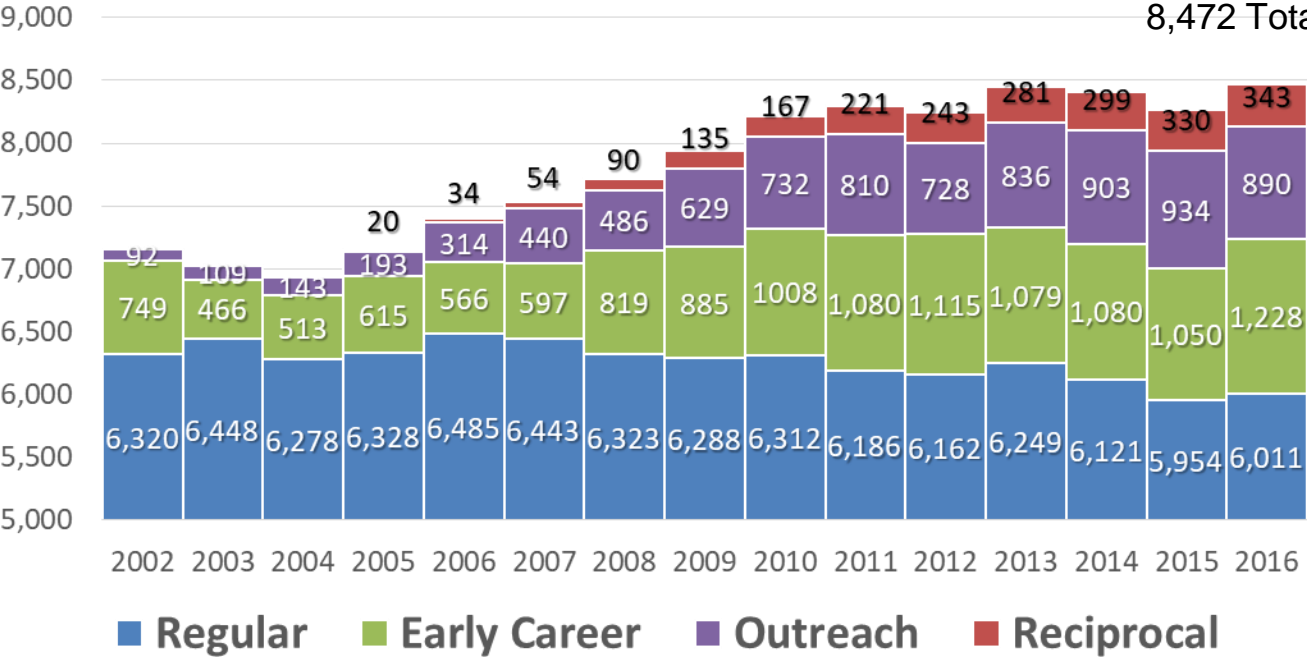
Data as of 12/31/2016

# Member Lifespan – Member Types

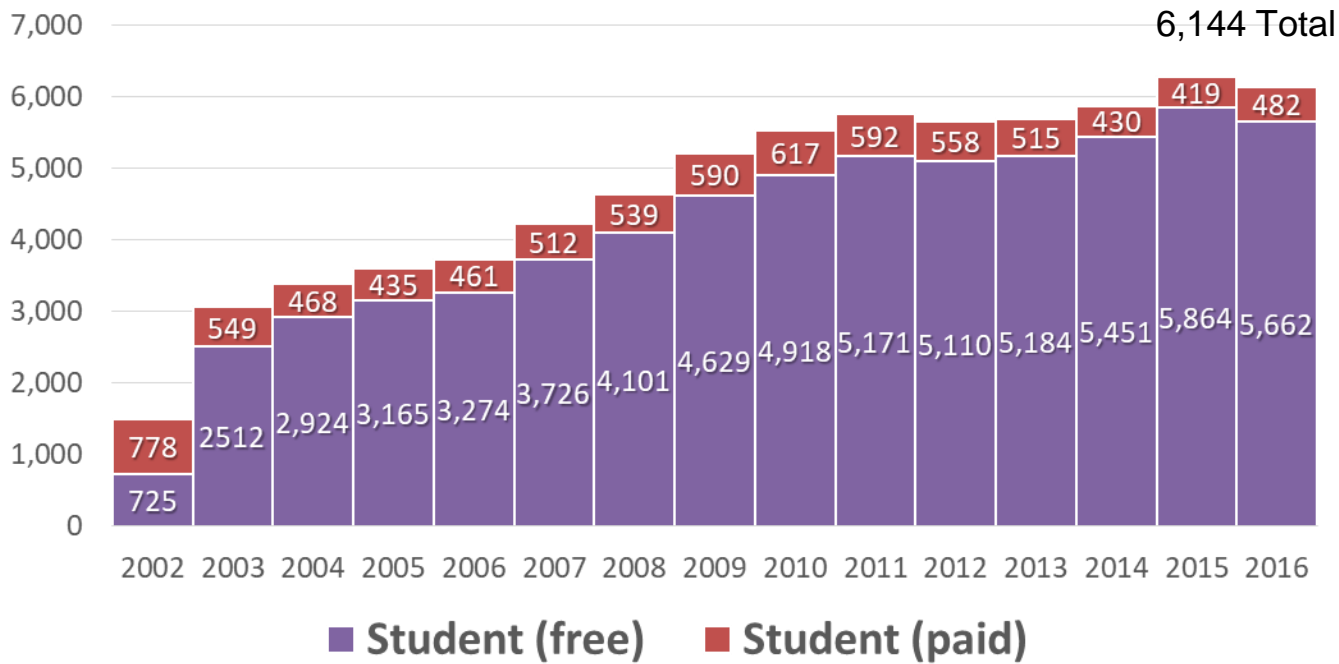


# Nonstudent Members: 2002-2016

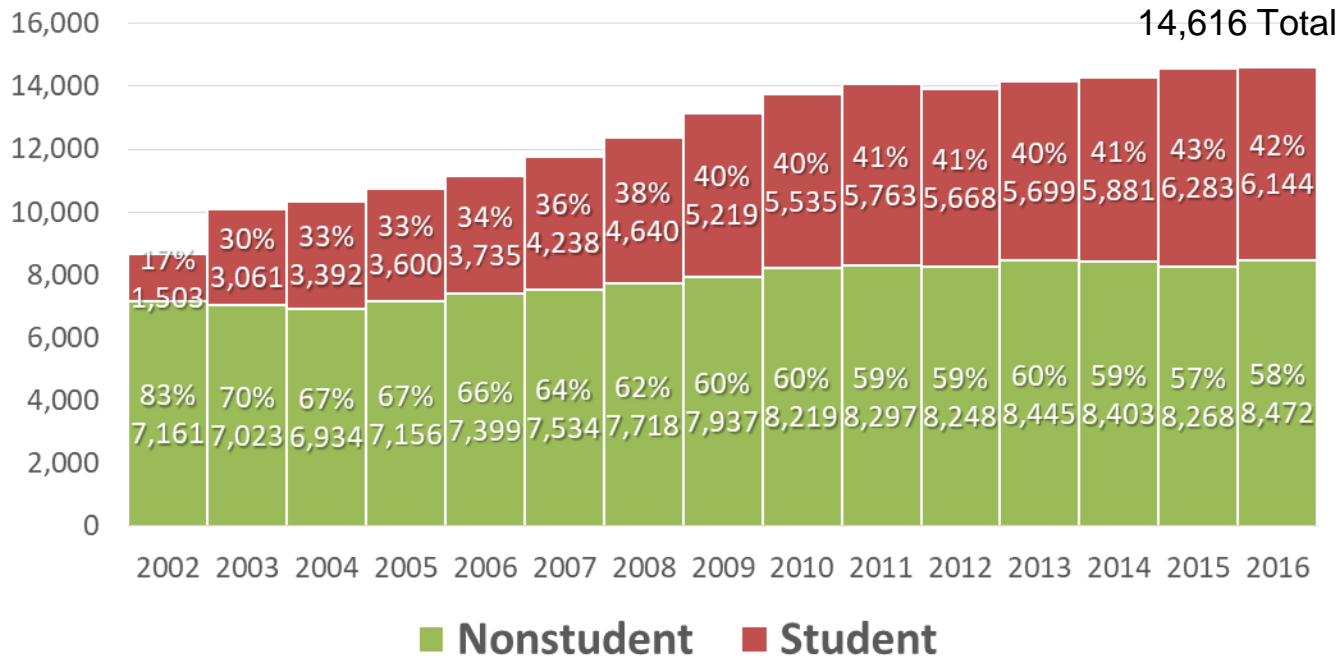
8,472 Total



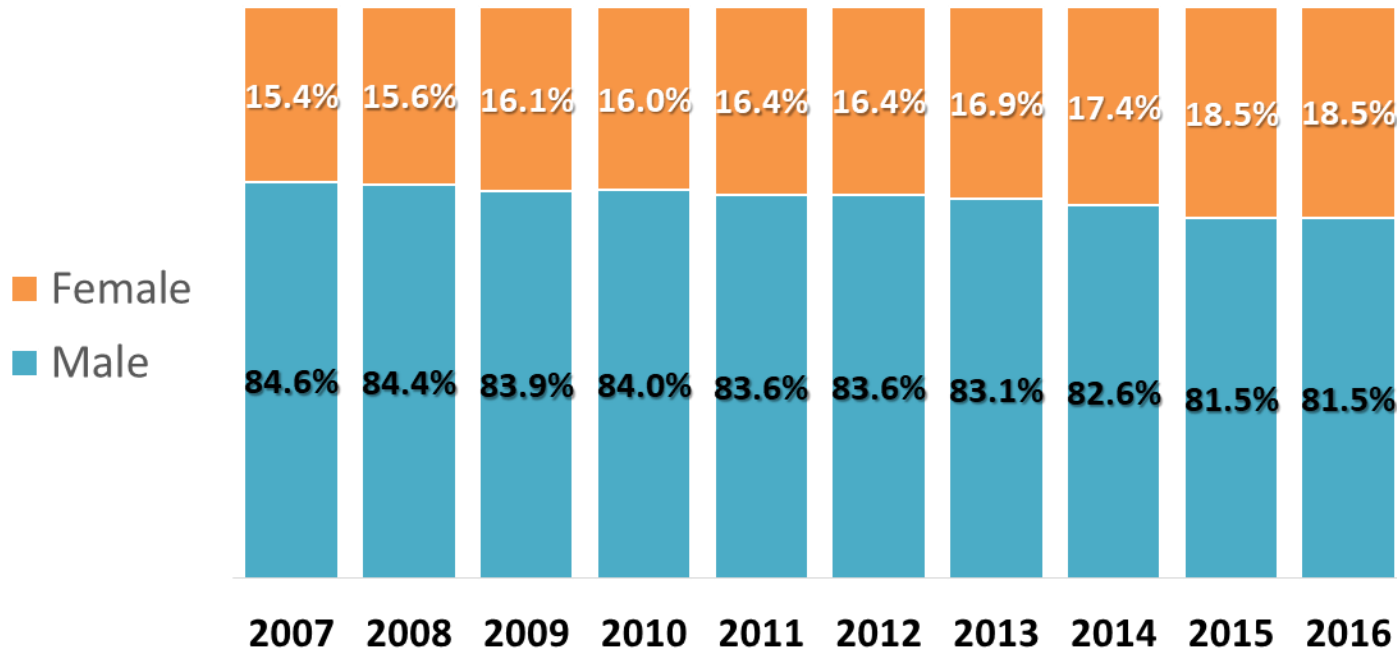
# Student Members: 2002-2016



# Student vs Nonstudent Members: 2002-2016

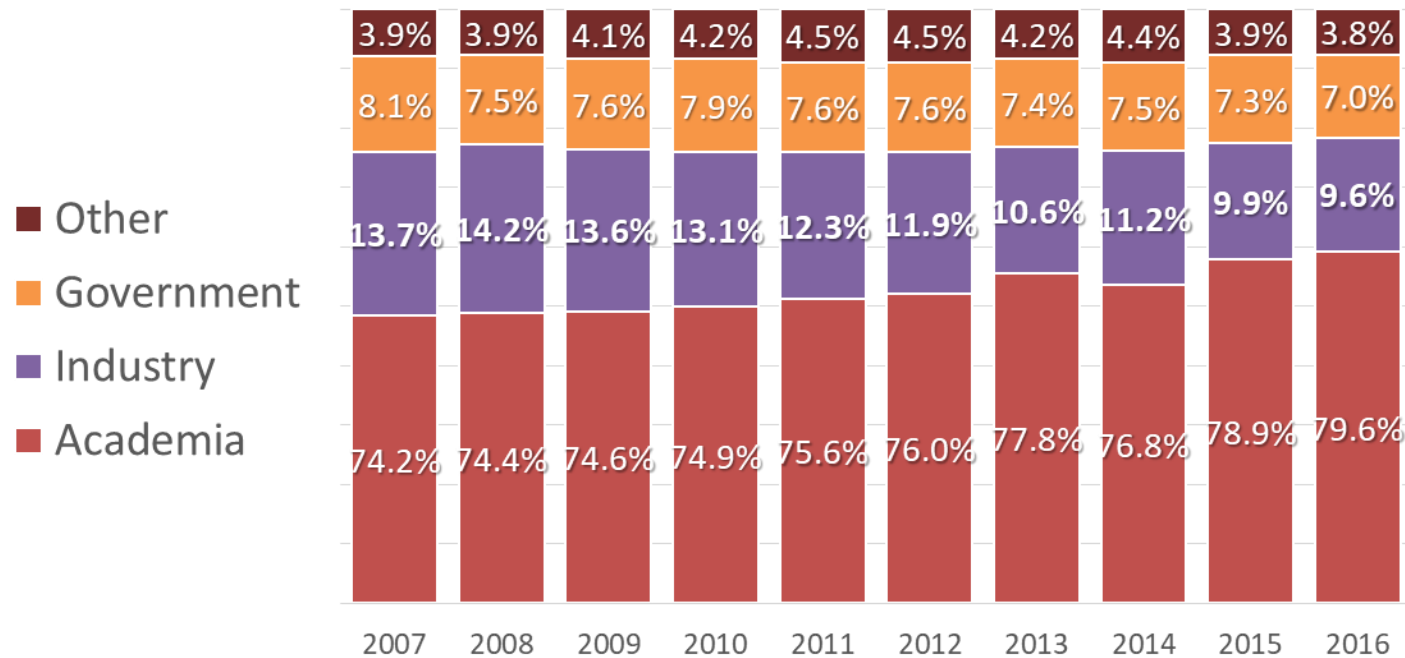


# Members by Gender: 2007-2016



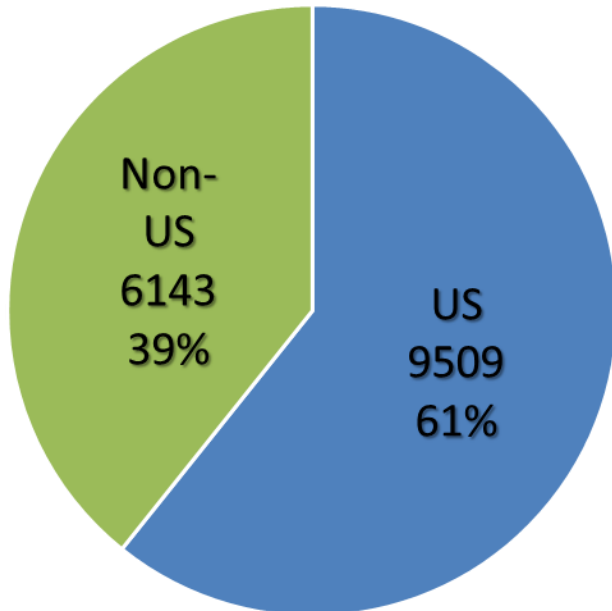


# Members by Affiliation: 2007-2016

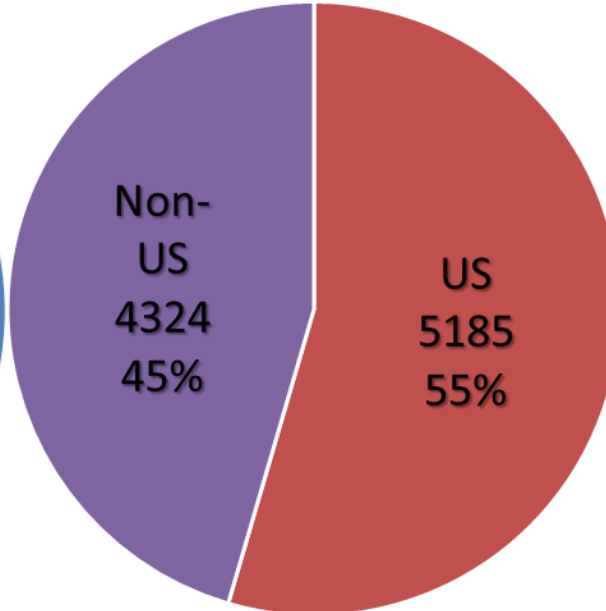


# Members by Country

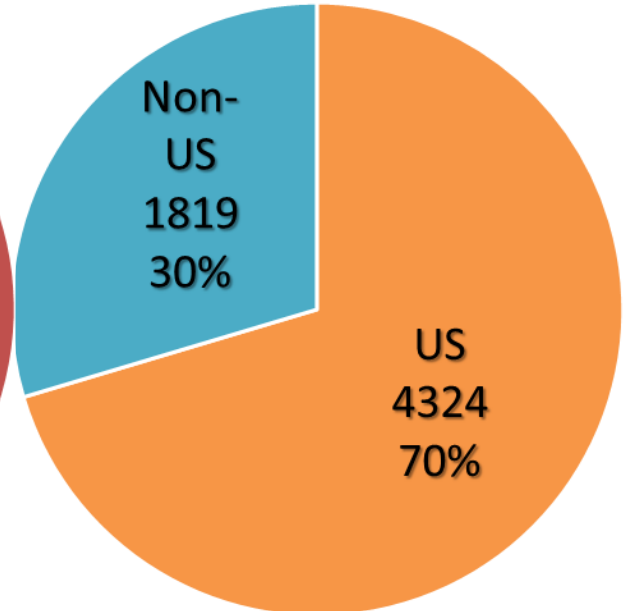
Overall



Non-Students

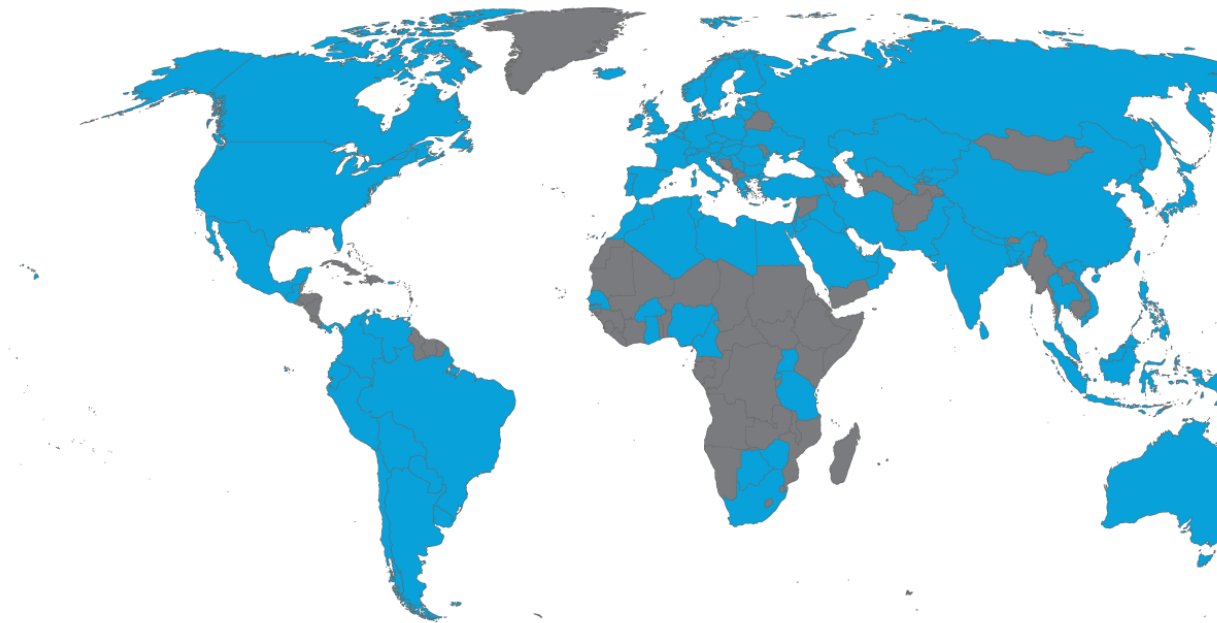


Students



# Members by Country

103 Countries

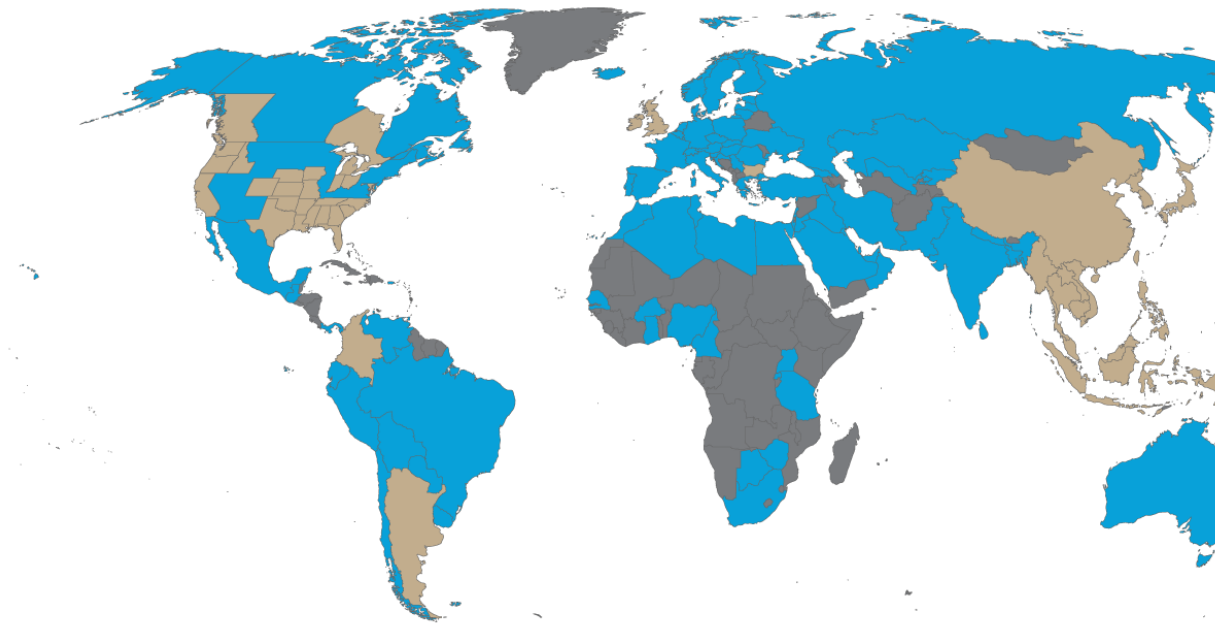


## Top 10 By Total Members

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

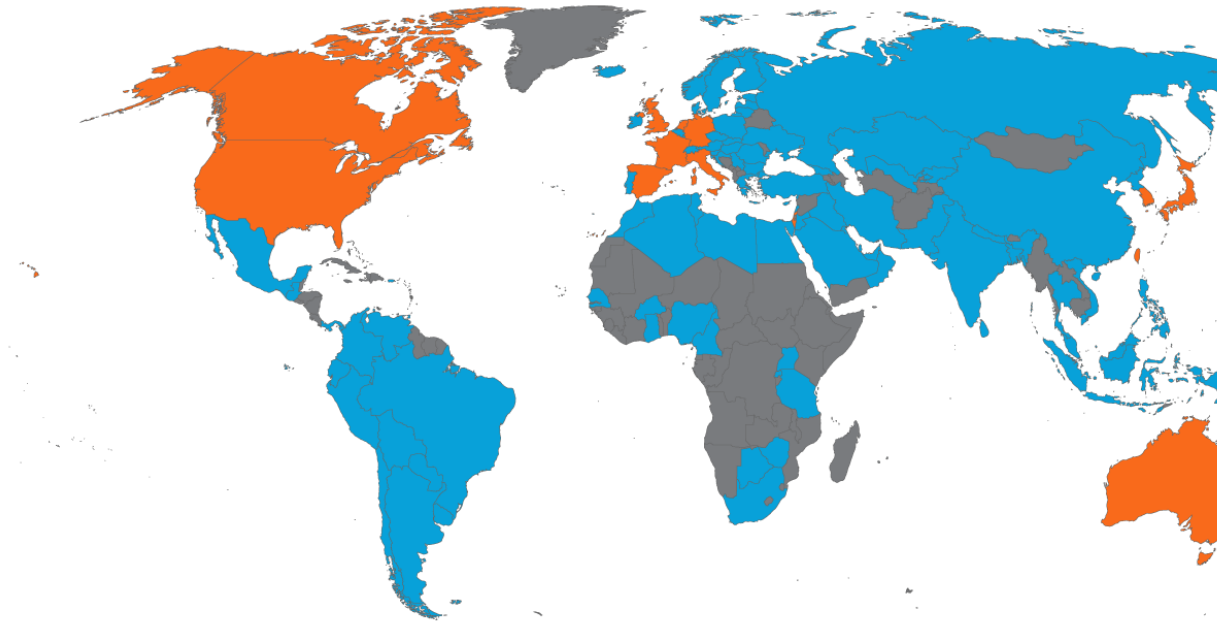
Colombia

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)

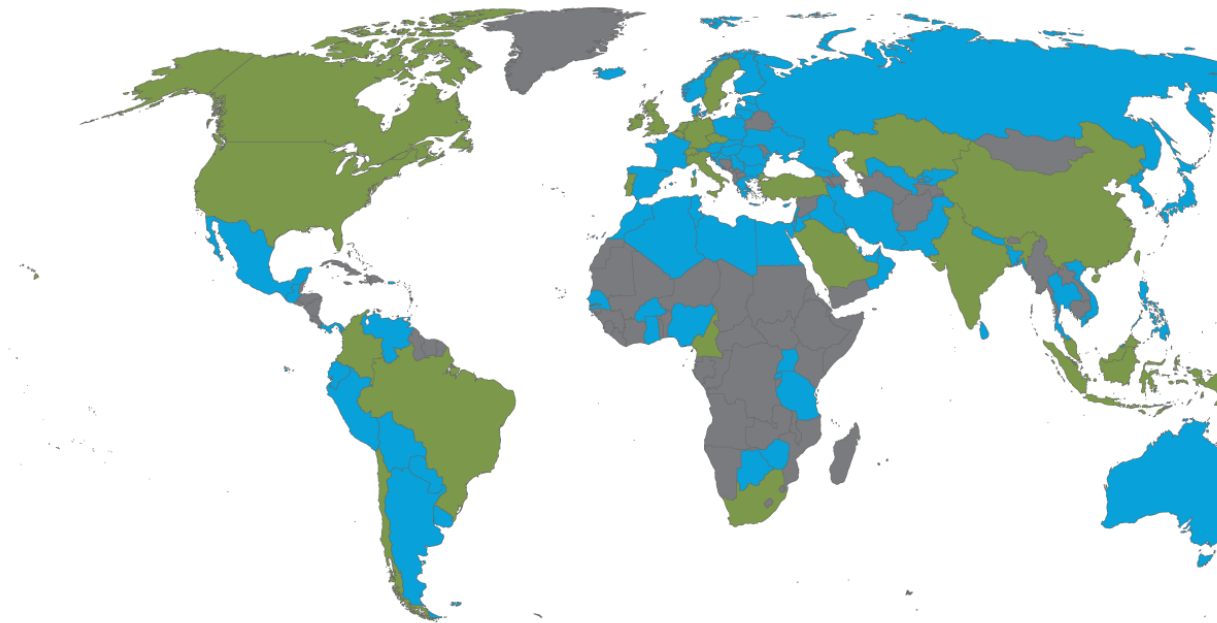
SMAI (France)

TWSIAM (Taiwan)

AWM (USA)

# Student Chapters

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



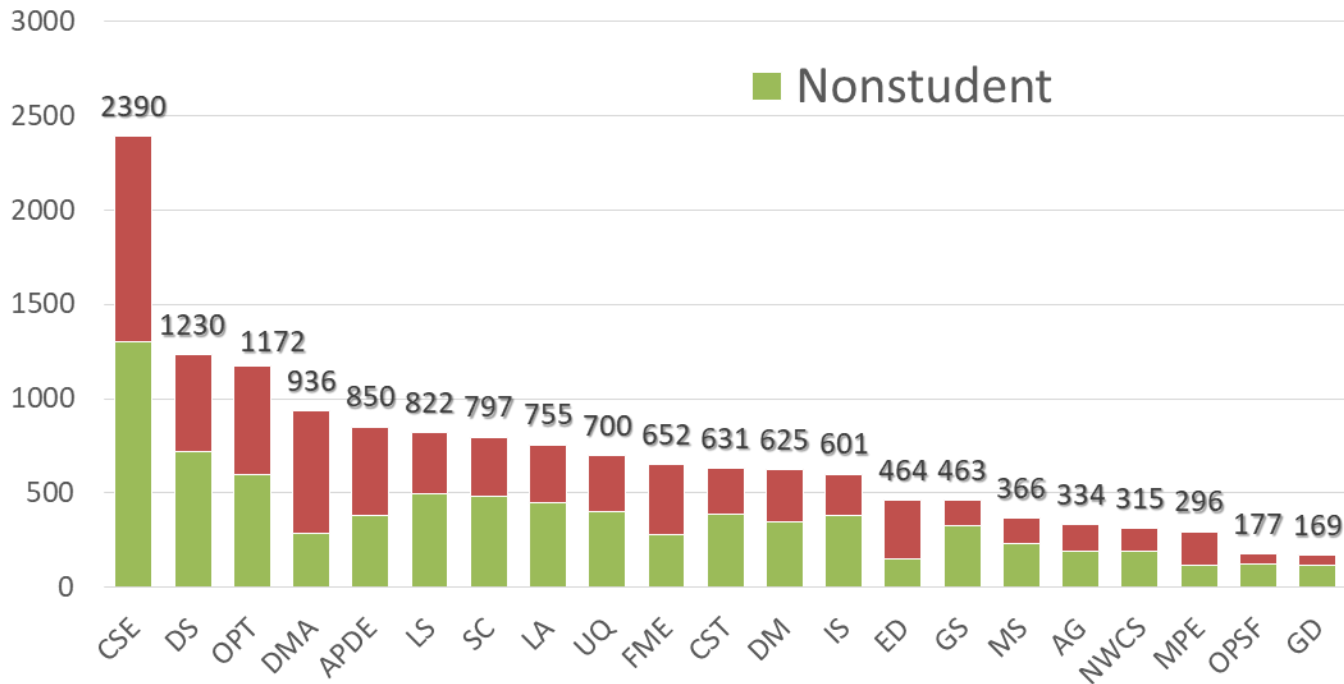
Chapters by Country	
USA	122
UK	10
Germany	6
Canada & India	5
Taiwan	3
Chile, China, Ireland, Italy, Netherlands, South Africa	2
Belgium, Brazil, Cameroon, Colombia, Czech Republic, Hong Kong, Indonesia, Kazakhstan, Malaysia, Saudi Arabia, Singapore, Sweden, Switzerland, Turkey	1

# 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

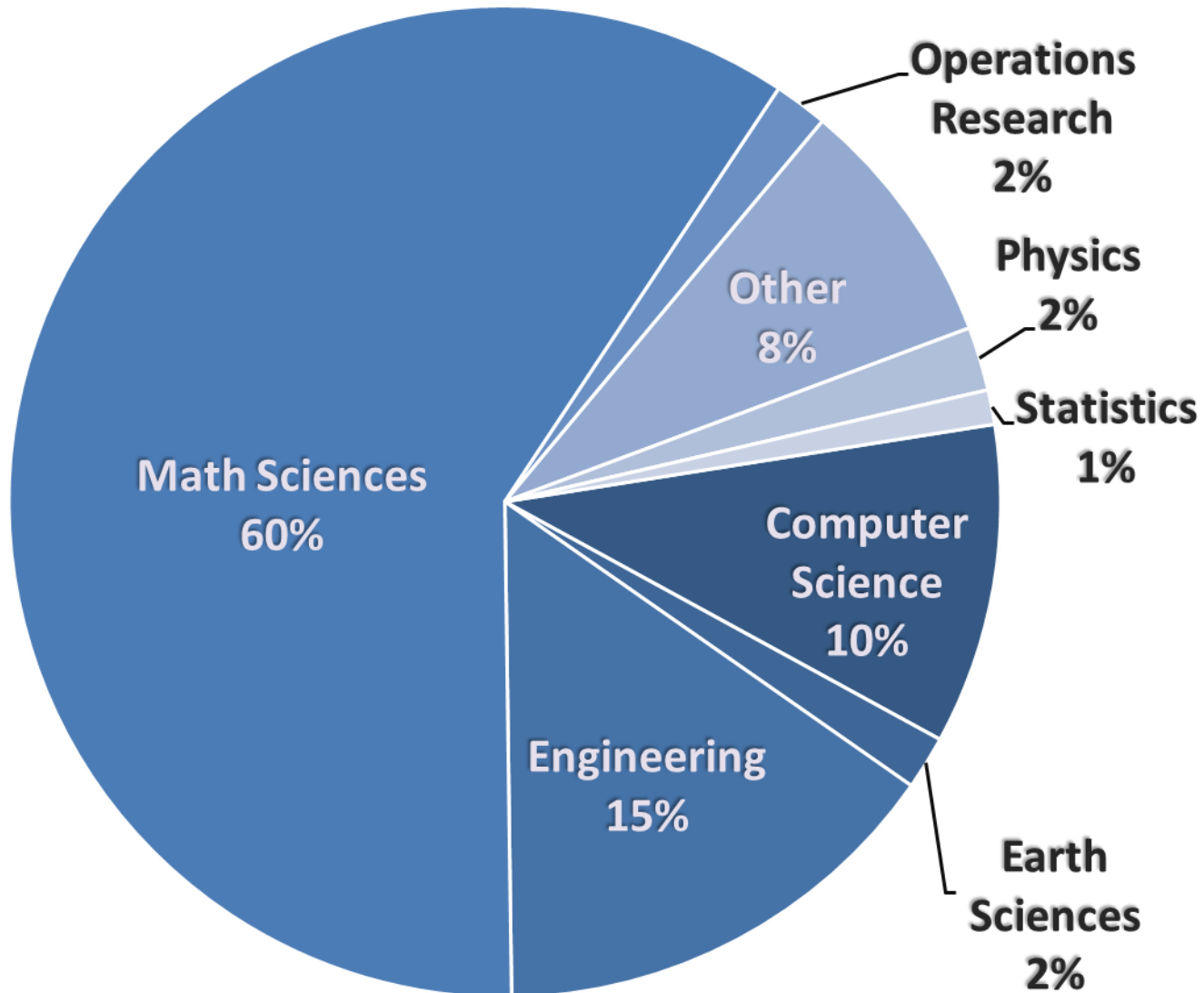
CS&E	2001
APDE	2003
FME	2003
NWCS	2003
MS	2008
AG	2010
DMA	2011
UQ	2011
AME	2016
MPE	2016

# 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](http://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

	<b>SIAM Members*</b>	<b>% SIAM Members*</b>	<b>All Fellows</b>	<b>% All Fellows</b>	<b>2017 Fellows</b>	<b>% 2017 Fellows</b>
<b>Total</b>			451		28	
<b>US</b>	5179	61.0%	338	74.9%	14	50.0%
<b>Non-US</b>	3312	39.0%	113	25.1%	14	50.0%
<b>Male</b>	6730	85.2%	396	87.8%	23	82.1%
<b>Female</b>	1171	14.8%	55	12.2%	5	17.9%
<b>Academic</b>	5086	81.1%	391	86.7%	23	82.1%
<b>Industry</b>	600	9.6%	29	6.4%	0	0.0%
<b>Govt/Lab</b>	438	7.0%	30	6.7%	5	17.86%
<b>Other</b>	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
<b>Total</b>			526		56	
<b>US</b>	5179	61.0%	399	75.86%	34	60.7%
<b>Non-US</b>	3312	39.0%	127	24.1%	22	39.3%
<b>Male</b>	6730	85.2%	459	87.3%	46	82.1%
<b>Female</b>	1171	14.8%	67	12.7%	10	17.9%
<b>Academic</b>	5086	81.1%	451	85.7%	50	89.3%
<b>Industry</b>	600	9.6%	22	4.2%	0	0.0%
<b>Govt/Lab</b>	438	7.0%	49	9.3%	6	10.7%
<b>Other</b>	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](http://www.siam.org/prizes)**



# SIAM Prizes

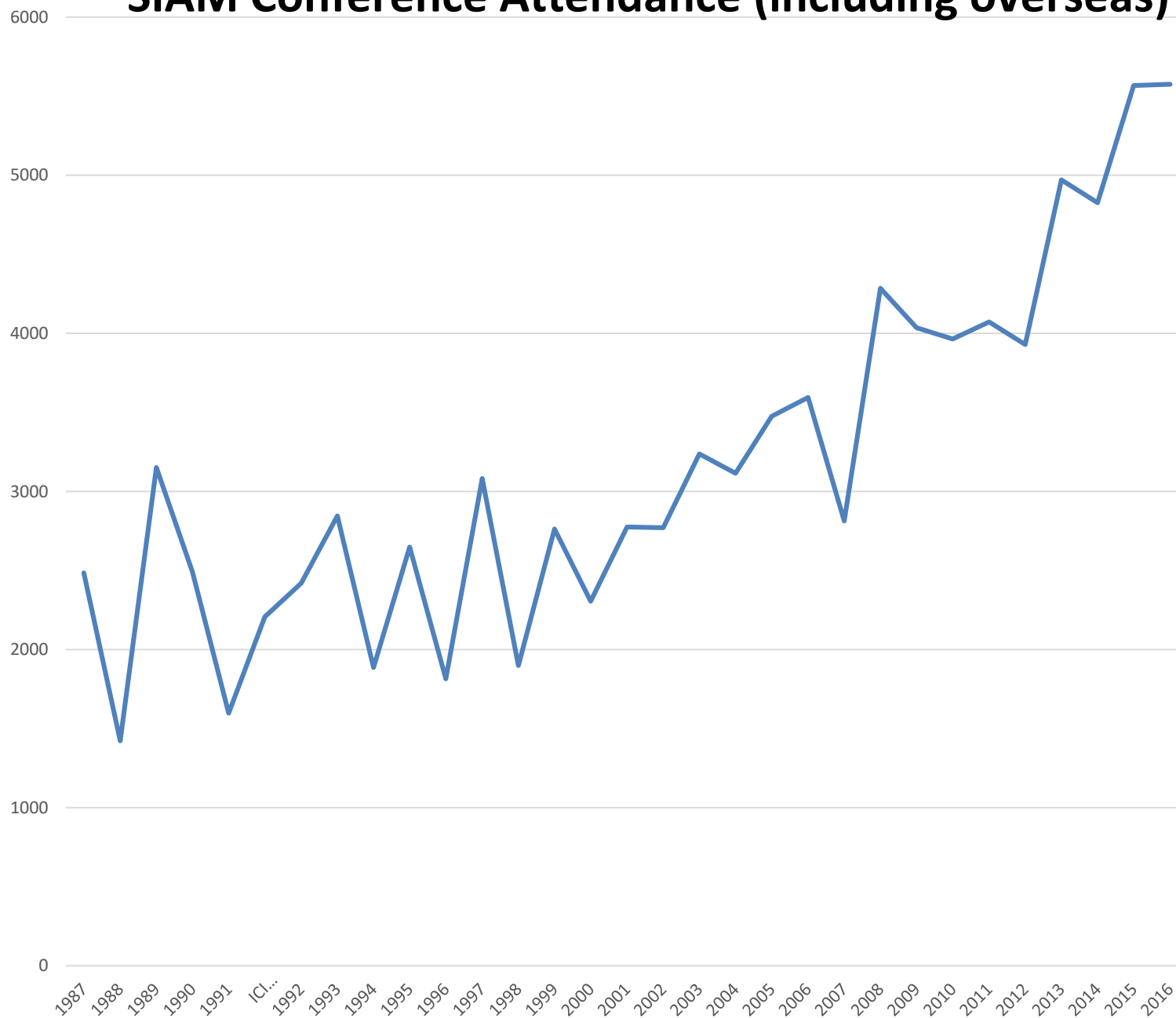
- **Nominations needed**, especially:
  - women, people in industry, and other under-represented groups.
- See <http://www.siam.org/prizes/nominations.php> for open calls
- John von Neumann, Kovalevsky, Cole, DiPrima, Polya, and Reid prizes are all open for nominations.

# 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

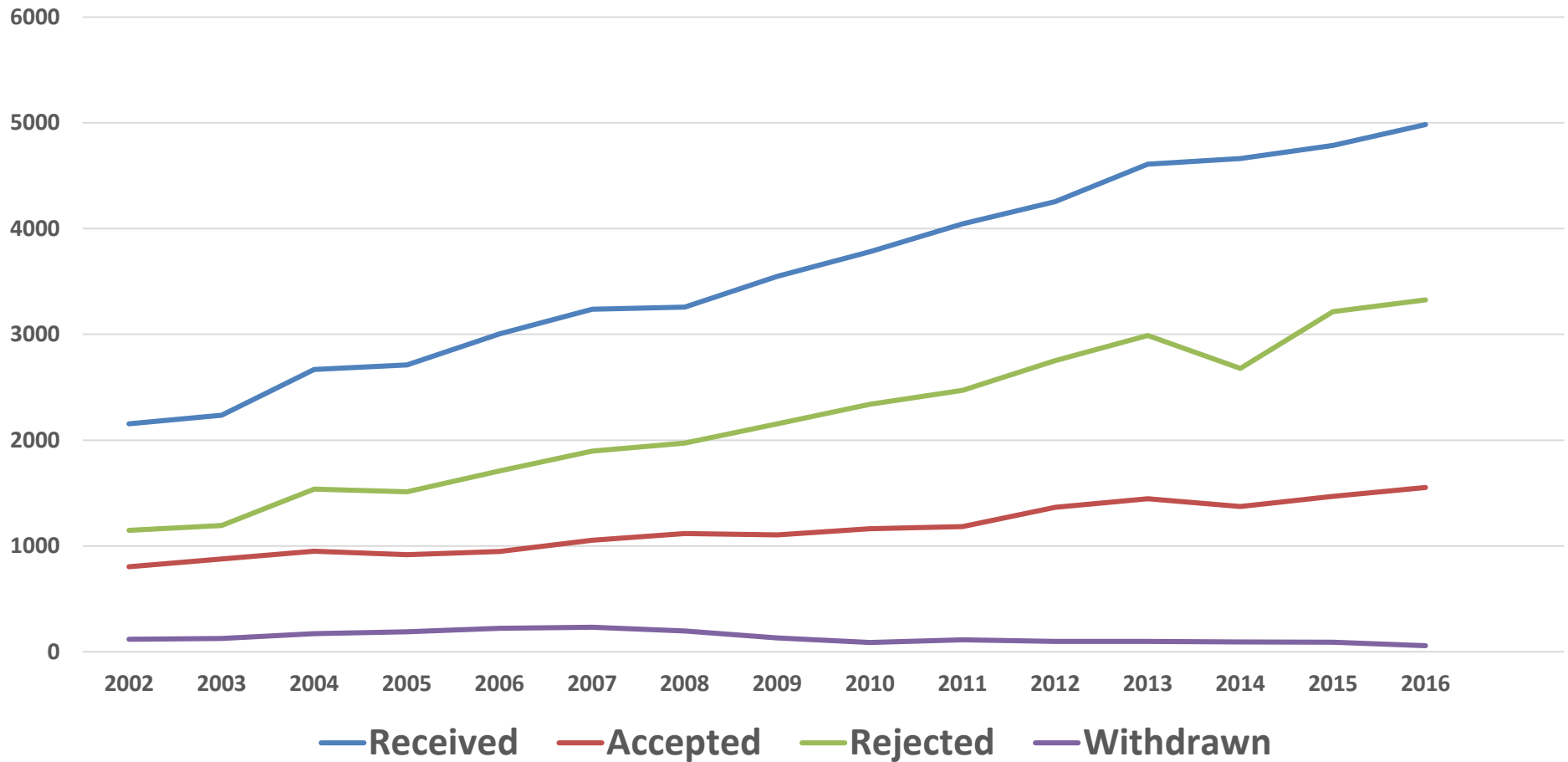
## SIAM Journals Online



# 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](http://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](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 Caflich](#)\* (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](http://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