

SIAG/CSE15 Business Meeting

Tuesday, March 17th

6:15-7:15pm

Room 355

**Calvin L. Rampton Salt Palace
Convention Center,
Lake City, Utah,**

**SIAM CONFERENCE ON
COMPUTATIONAL SCIENCE**



AND ENGINEERING

SATURDAY, MARCH 14 - WEDNESDAY, MARCH 18, 2015

**THE CALVIN L. RAMPTON SALT PALACE
CONVENTION CENTER
SALT LAKE CITY, UTAH, USA**



THANKS TO OUTGOING SIAG/CSE OFFICERS

- **Chair:** Uli Ruede
- **Vice Chair:** Karen Willcox
- **Program Director:**
Lois Curfman McInnes
- **Secretary:** Hans De Sterck



WELCOME NEW SIAG/CSE OFFICERS

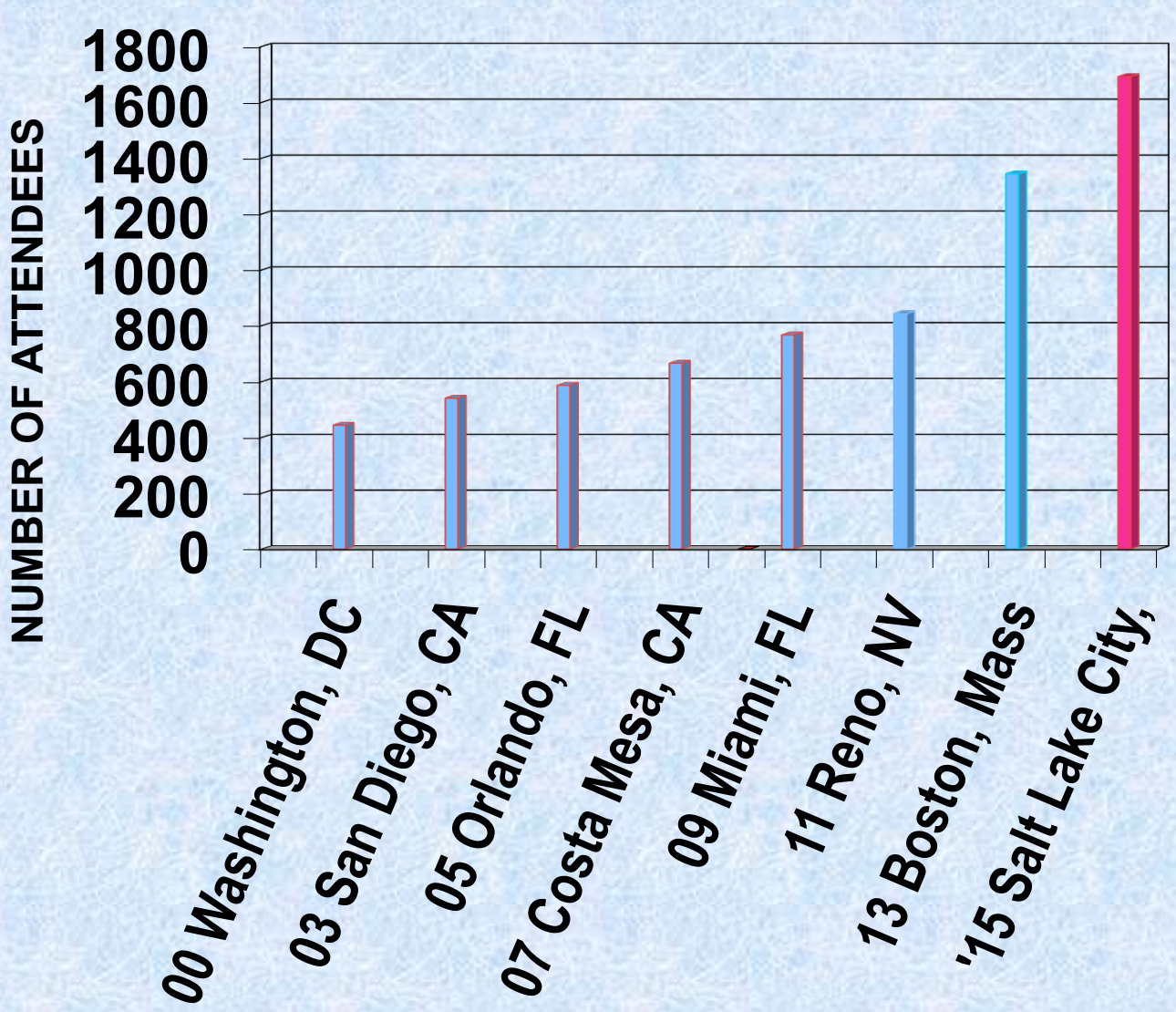
1/1/15 to 12/31/16

- **Chair:** Lois Curfman McInnes
- **Vice Chair:** Hans De Sterck
- **Program Director:**
Jan Hesthaven
- **Secretary:** Suzanne Shontz

ANNOUNCEMENTS

- 2016 Election
- 2016 Charter Renewal
- wiki.siam.org/siag-cse
- SIAG/CSE electronic mail list
 - siam-cse@siam.org
- SIAM News*: Story ideas
- SIAM Blogs

SIAG/CSE CONFERENCE HISTORY



Registration through Tuesday: 1692

SIAG/CSE CONFERENCE CSE15

Organizing Committee Co-Chairs

Hans De Sterck, University of Waterloo,
Canada

Chris Johnson, University of Utah, USA

Lois Curfman McInnes, Argonne
National Laboratory, USA

SIAM PRESENTS

Audio slide capture available May 2015

Special Section of the SIAM Journal on Scientific Computing (SISC) in Association with CSE15

SISC *Special Section*

Computational Science and Engineering

- CSE software
- Big data in CSE

**MANUSCRIPTS WILL BE ACCEPTED UNTIL
MAY 31, 2015**

Special Section of SISC for CSE15

http://www.siam.org/journals/sisc/sisc_special.php

In the area of CSE software, specific topics of interest for the Special Section include novel design and development of high-quality software for various aspects of CSE, for example the following:

- CSE software design and development to support advanced parallel algorithms and high-performance computing
- approaches for exploiting new architectural features for scientific simulation, including many-core, accelerators, multithreading, and heterogeneity
- libraries for scientific computing
- scientific software problem solving environments
- approaches to achieving portable performance of numerical codes
- quality assurance of scientific software and reproducibility of results
- innovative implementations of scientific computing and visualization algorithms

In the area of big data, specific topics of interest include the following:

- methods for data-driven scientific discovery
- integrating models and massive data to produce better predictions
 - large-scale data assimilation
 - (Bayesian) inverse problems for data-driven science
 - uncertainty quantification with big data
- algorithms and methods for scientific discovery in large-scale experimental or observational data
- sensor networks at massive scale
- numerical and combinatorial algorithms for big data (including randomized algorithms and large-scale optimization)
- data stream algorithms and algorithms and methods for large networks
- fast scalable algorithms for supervised and unsupervised learning (such as nonnegative matrix factorization)
- visual analysis of big data
- software frameworks for large-scale data processing
- efficient implementation of big data algorithms in specialized software or hardware environments

NEW SIAM FELLOWS IN SIAG/CSE

2013

- **Benoit Couet**
- **Timothy Davis**
- **Qiang Du**
- **Haesun Park**
- **Horst Simon**
- **Peter Turner**

2014

- **Donald Estep**
- **Omar Ghattas**
- **Philip Gill**
- **Jan Hesthaven**
- **Yuriko Renardy**
- **Ridgway Scott**
- **Mikhail Shashkov**

NEXT CONFERENCE: CSE17

- **Feb-March 2017**
- **Location TBD**
- **Jan Hesthaven et al.**

OTHER CONFERENCES

**Sessions at
2016 SIAM Annual Meeting
July 11-15, 2016
Boston, Massachusetts**

OTHER MEETINGS

ICIAM 2015

Beijing, China

August 10-14, 2015

Poster sessions still being accepted
until April 30, 2015

In support of ICIAM, there will be no
SIAM annual meeting in 2015



**The 2015 Gene Golub SIAM Summer School on
RandNLA: Randomization in Numerical Linear Algebra
Delphi, Greece
June 15-26, 2015**

www.siam.org/students/g2s3/index.php

**Call for proposals 2016 Gene Golub SIAM
Summer School**

Letter of intent due January 31, 2015

Join SIAM!

- If you paid non-member registration fees, you'll get a discount on membership,
 - Non-member registrant, receive \$130 credit, join for \$15 (normally \$145).
 - Non-member mini speaker/organizer registrant, receive \$65 credit, join for \$80 (normally \$145).
- If you're not a SIAG/CSE member, but are a SIAM member, join SIAG/CSE for free.

STUDENTS CAN JOIN 2 SIAGS FOR FREE!

- SIAM and SIAG memberships are a good way to be seen/remembered.

Benefits of SIAM Membership

- *SIAM News*
- *SIAM Review*
- *Unwrapped*
- 80%-95% journal discount
- 30% book discount
- 20%-30% conference discount
- Eligible to nominate or be nominated as a SIAM Fellow
- Participate in SIAM governance
- Join SIAM Activity Groups
- Nominate 2 students for free membership
- Prizes to recognize excellence
- CML - combined membership directory

For Students:

- Free or discounted memberships
- Student chapters
- Prizes
- Educational resources
- Fellowship and research opportunities
- Career options/guidance
- Join 2 SIAM Activity Groups for FREE!

**SIAG/CSE
Membership
Report as of
12/31/14**

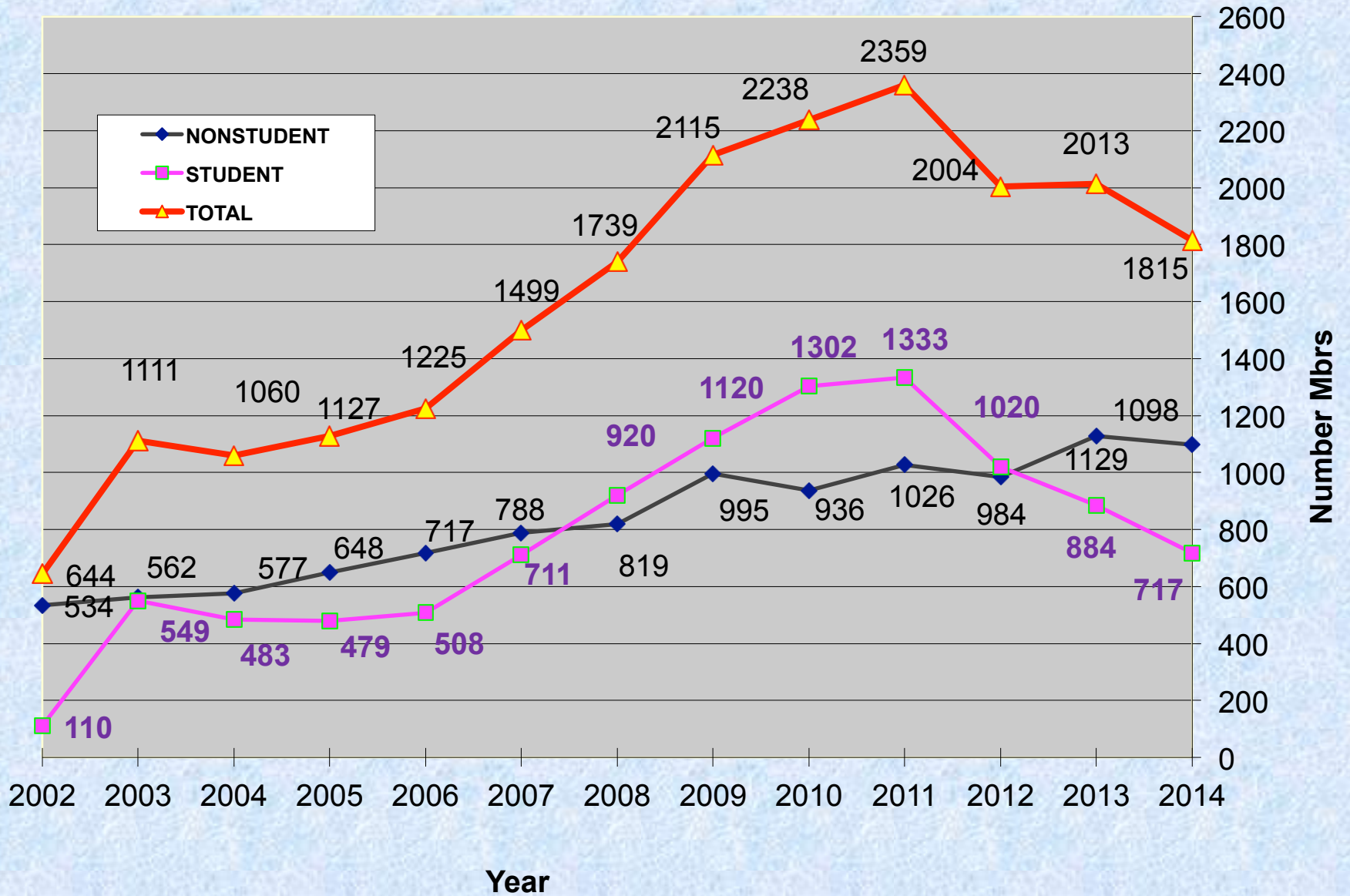
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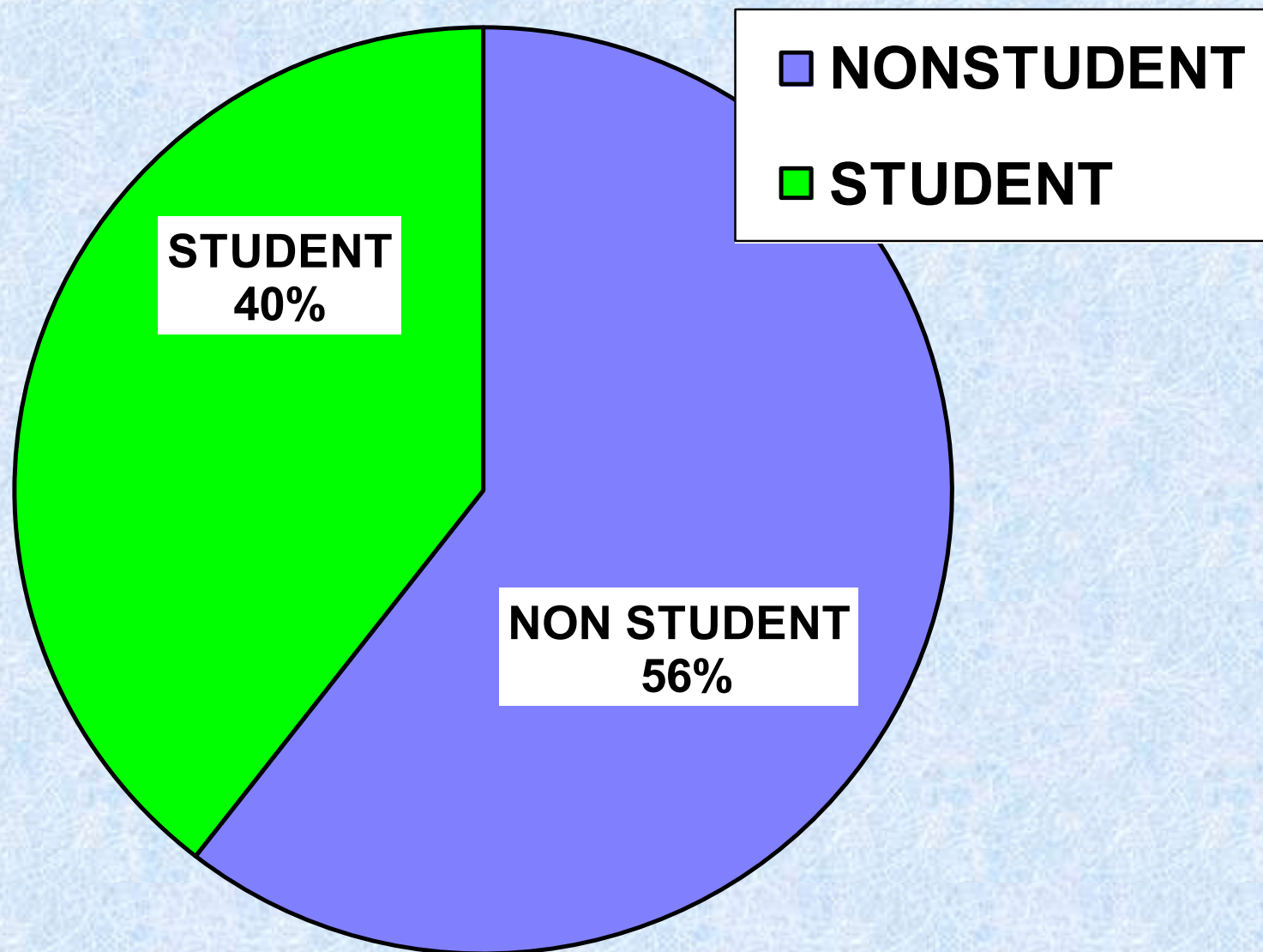
SIAG/CSE Membership History





SIAG/CSE MEMBERS

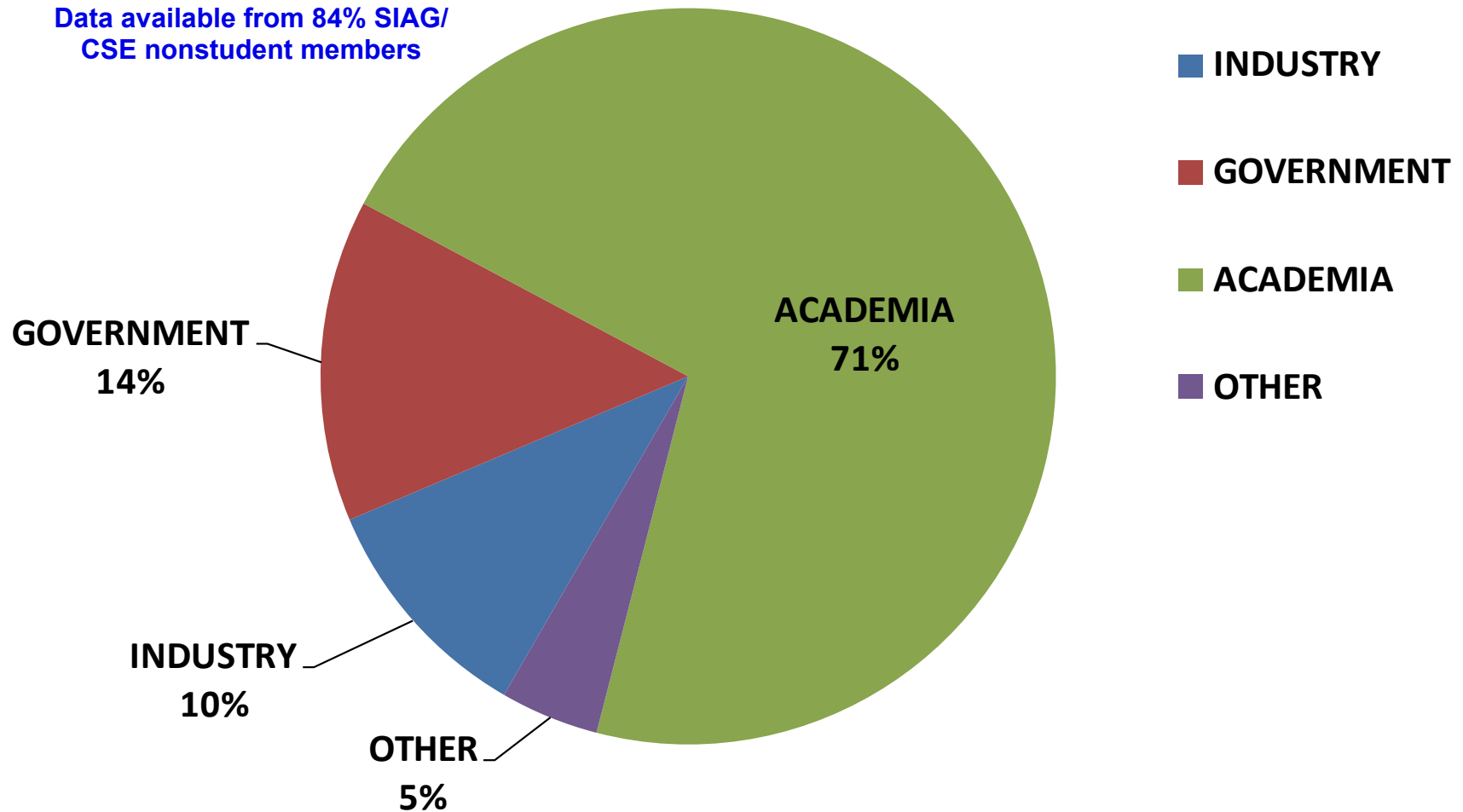
1,815 as of 12/31/14



SIAG/CSE MEMBERS BY EMPLOYER TYPE

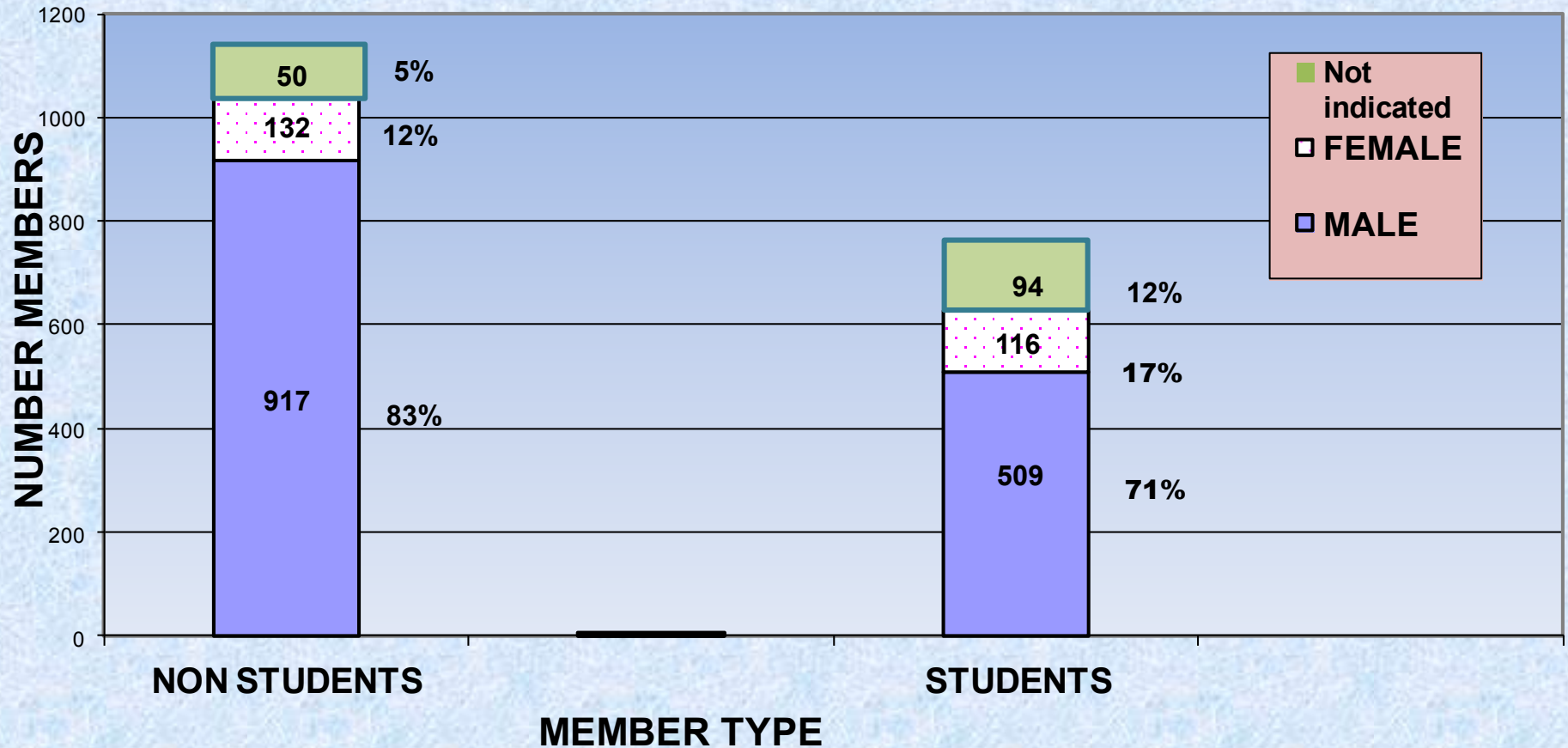
not including students

Data available from 84% SIAG/
CSE nonstudent members

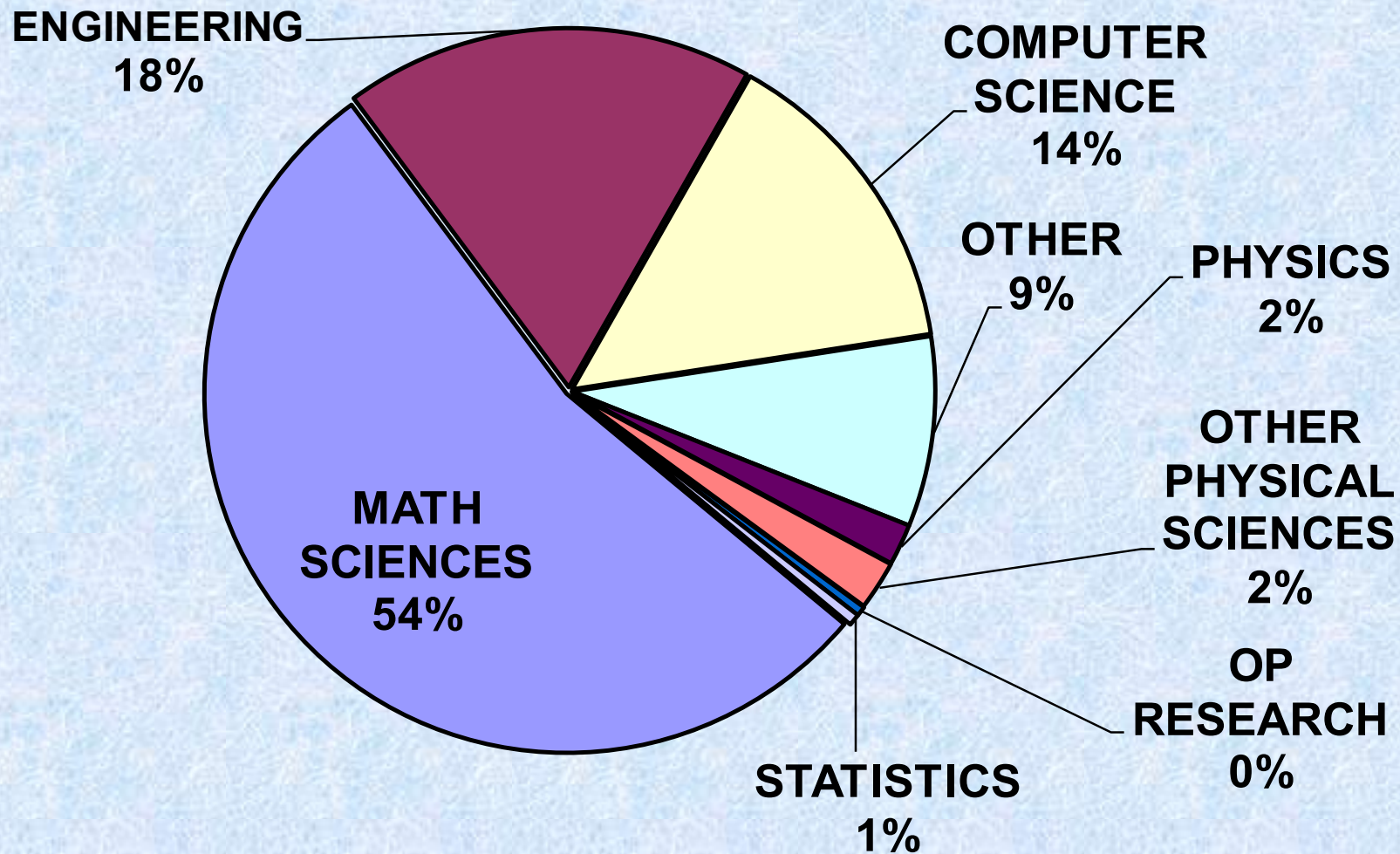


SIAG/CSE MEMBERSHIP BY GENDER

MALE 78% FEMALE 14% Not indicated 8%



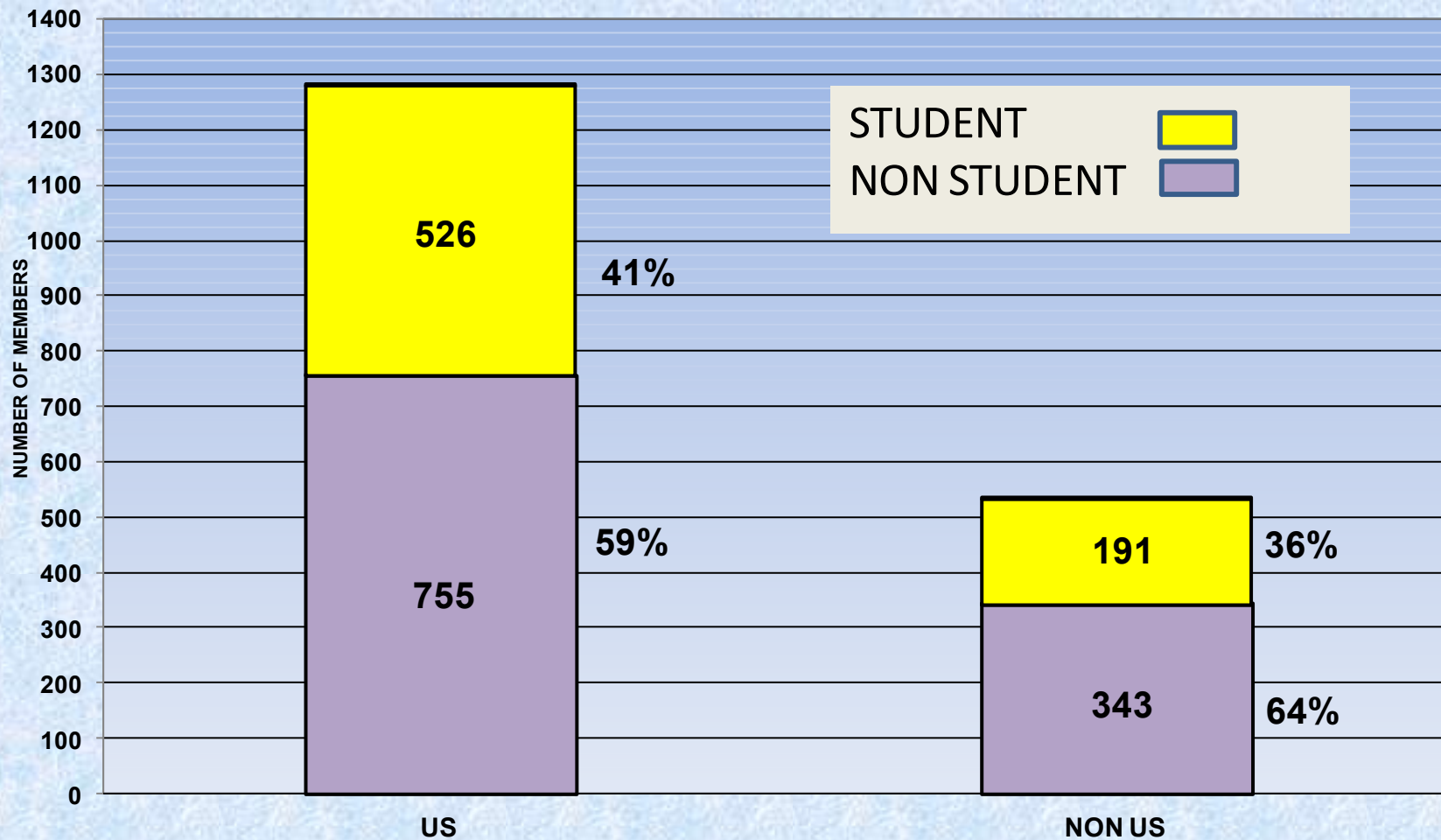
SIAG CSE DEPARTMENTS





SIAG/CSE MEMBERS BY GEOGRAPHY

71% US, 29% Outside US





SIAG/CSE FUTURE PLANS

- **Possible Other Activities**
 - **SIAG/CSE Early Career Scientist Prize**
 - **SISC Journal prize**
- **Other Business?**

SIAG/CSE CONTACTS



- Chair:** **Lois Curfman McInnes**
curfman@mcs.anl.gov
- Vice Chair:** **Hans De Sterck**
hdesterck@uwaterloo.ca
- Program Director:** **Jan Hesthaven**
Jan.Hesthaven@epfl.ch
- Secretary:** **Suzanne Shontz**
shontz@ku.edu