

2020 SIAG/IS

SIAM Conference on Imaging Sciences

Imaging Sciences Business Meeting



Conference on
Imaging Science



Society for Industrial and
Applied Mathematics

SIAG/IS Officers

Chair:

Carola-Bibiane Schönlieb

*

Vice Chair:

Hongkai Zhao

*

Program Director:

Gabriele Steidl

*

Secretary:

Michael Wakin

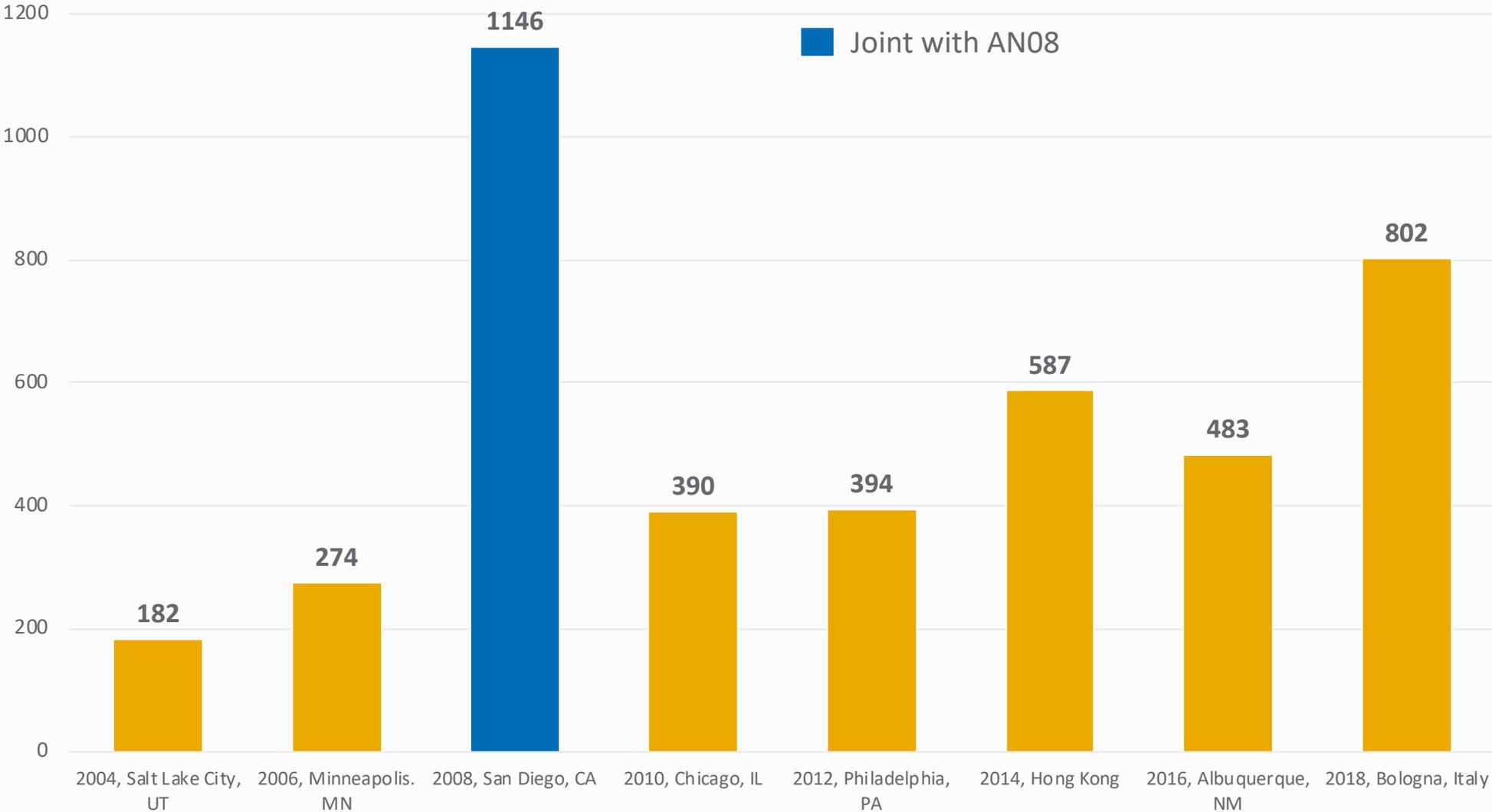
SIAG/IS Announcements

- SIAG/IS electronic mailing list: siam-imaging@siam.org
- SIAG/IS websites:
 - <https://www.siam.org/membership/activity-groups/detail/imaging-science>
 - http://wiki.siam.org/siag-is/index.php/Main_Page
 - SIAM News: Story Ideas
- SIAM Blogs
- SIAG/IS Leadership Suggestion Form:
 - <https://www.siam.org/forms/siam-activity-group-leadership-form>

SIAM Community Site

- New online community/forum planned to replace email listservs for all SIAGs.
- Early stages of implementation
 - Tentative launch in **July 2020**
- New features will include member profiles, searchable membership database, file storage, etc.
- Mobile, tablet, and desktop compatible
 - Still accessible via email
 - Customizable digest options

SIAG/IS Conference History



2020 SIAG/IS

Membership Report

(data as of December 31, 2019)



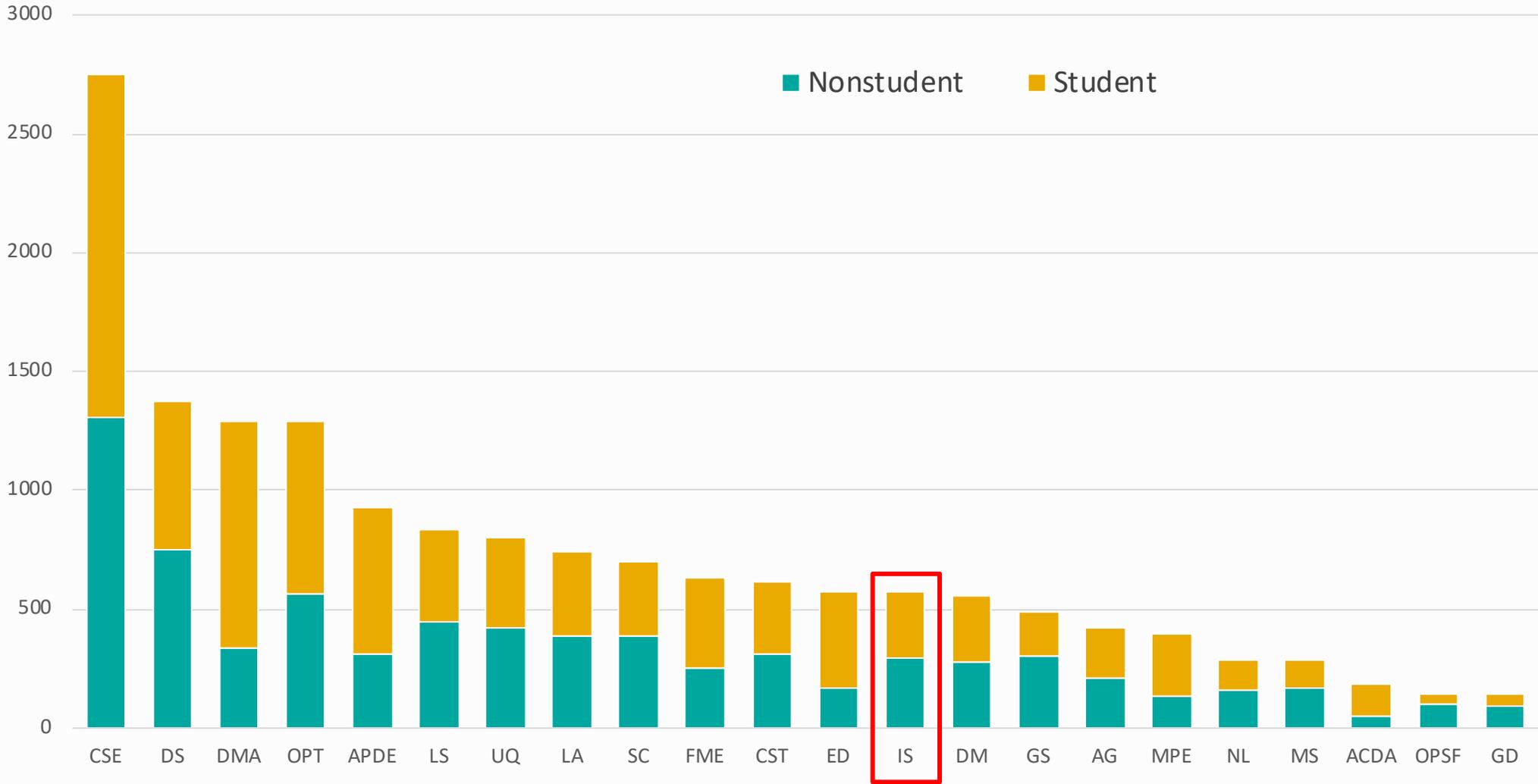
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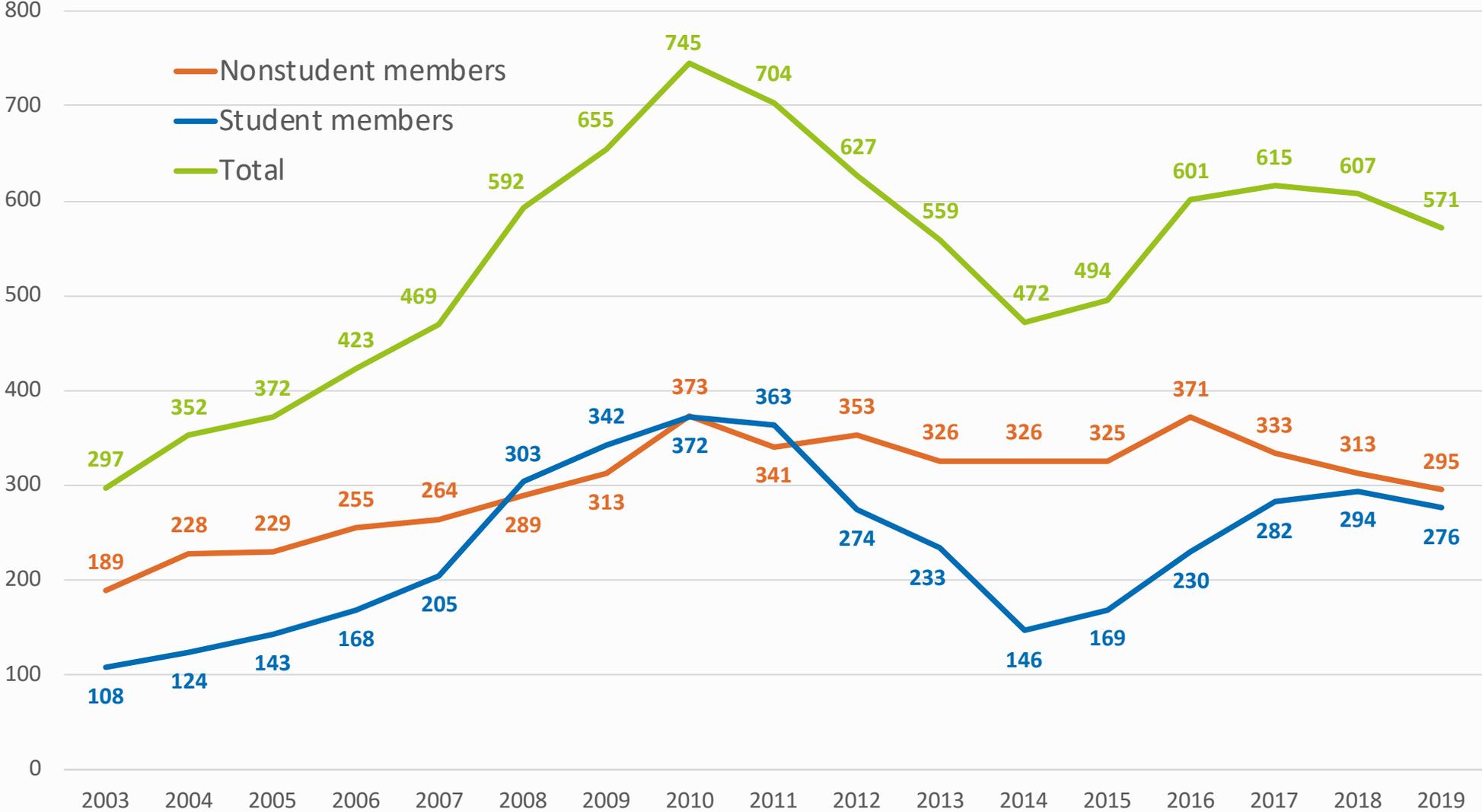


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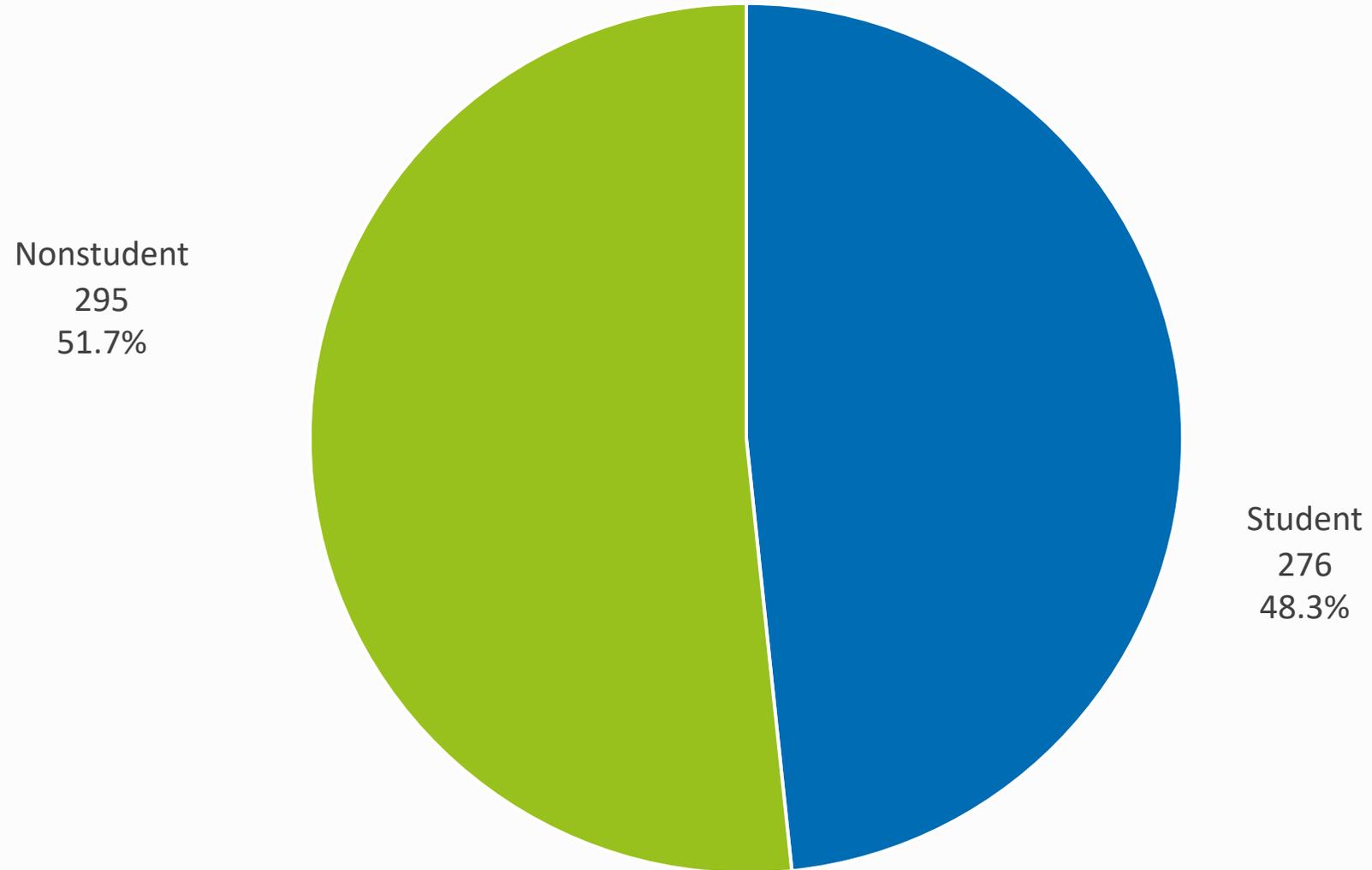
SIAG Overall Membership



SIAG/IS Membership Demographics



SIAG/IS Membership Demographics

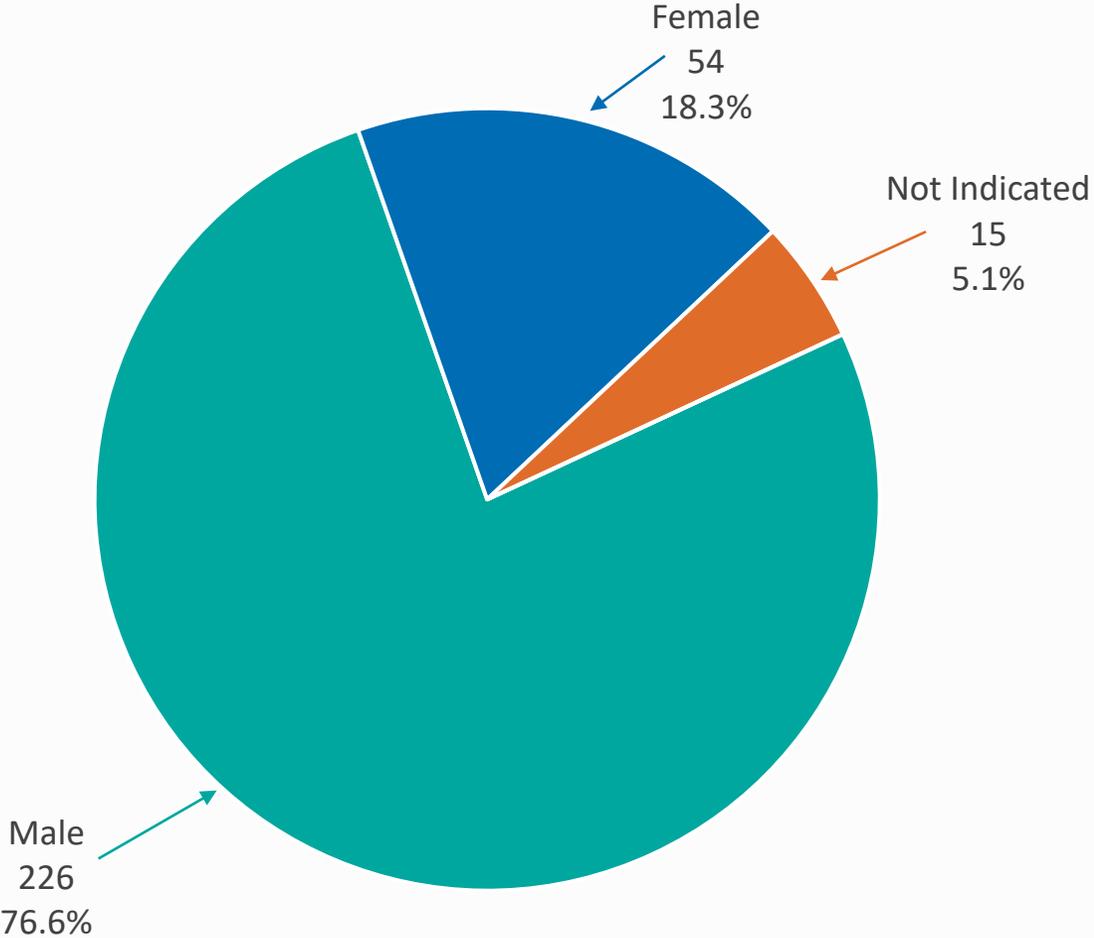


SIAG/IS Membership by Geography

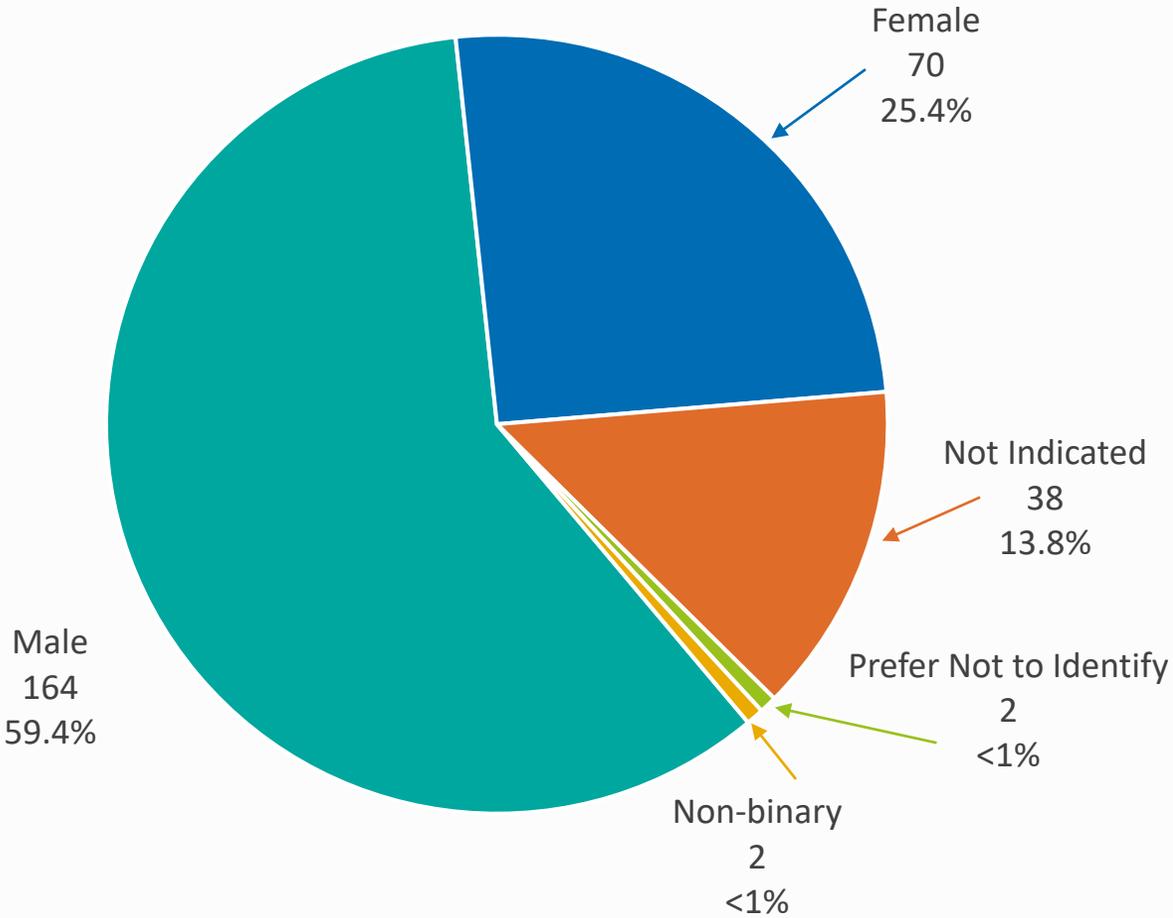
	Nonstudent		Student		Total	
US	180	32%	185	32%	365	64%
Non-US	115	20%	91	16%	206	36%
Total	295	52%	276	48%	571	

SIAG/IS Membership by Gender

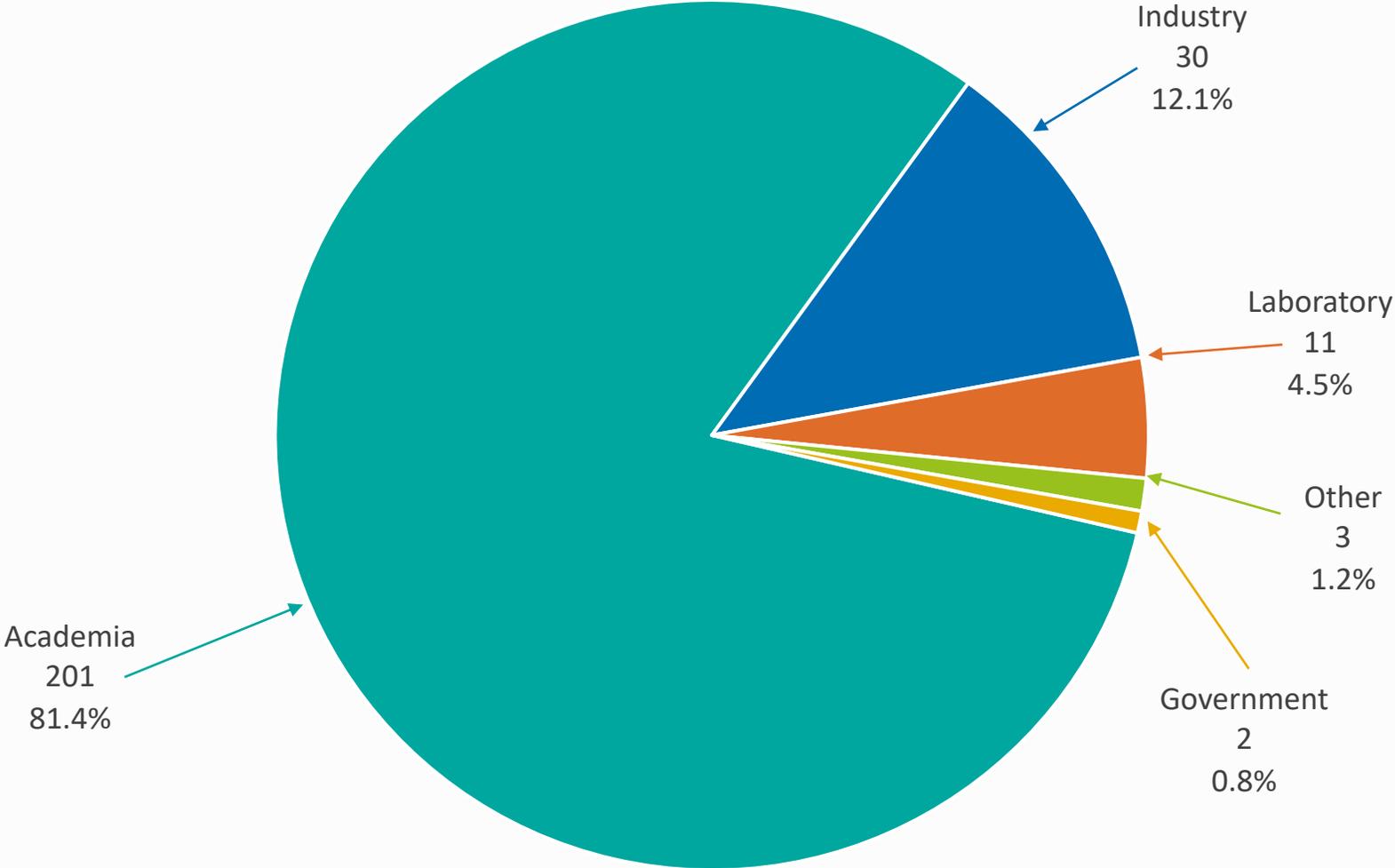
Nonstudents



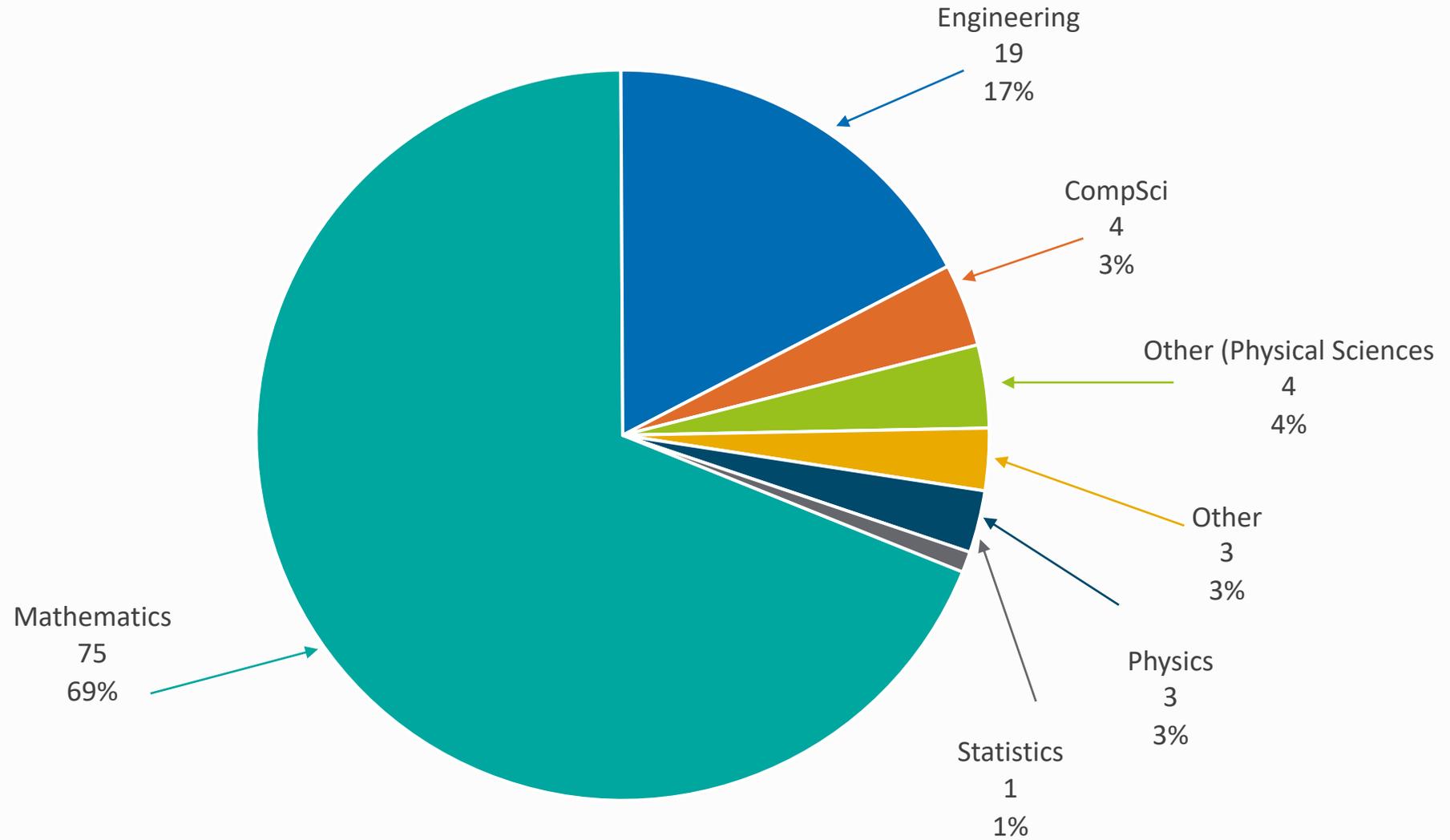
Students



SIAG/IS Membership by Employer Type



SIAG/IS Membership by Department Type



SIAG/IS Prize nominations

- Many new awards in recent years (e.g. SIAG/IS early career prize since 2016)
- Awards help promote the field and important research
- SIAM requires at least 3 new nominations or an award will not be given for that cycle
in 2018 no SIAG/IS award was made due to a lack of nominations!
In 2020 (last Friday) we awarded
 - the [SIAG/IS early career prize](#) to [Yaniv Romano](#) (Stanford), and
 - the [SIAG/IS best paper prize](#) for the paper “[Plug-and-Play Priors for Bright Field Electron Tomography and Sparse Interpolation](#)”, published in IEEE Transactions on Computational Imaging (2016), presented by [Martin Bouman](#) (Purdue)
- Need SIAG members to nominate strong candidates or encourage strong nominations!

SIAG/IS Benchmark problems and data

- Benchmark tests and data sets, such as ImageNet, play an important role in testing, studying and understanding many new data driven techniques.
- Ever-growing need and interest for data driven and enabled approaches for science and engineering problems for which there are good physical and mathematical models.
- Need high quality, well documented, widely approved, and user friendly benchmark data.
- Leverage both data based and model based methods to attack new and more challenging problems.
- Provide a platform for communications and collaborations.
- SIAM has a unique position and comprehensive expertise to develop such a platform.
- Far-reaching impacts beyond SIAM community.

SIAG/DATA New activity group

- New activity group on Data Science
- Establish links with SIAG/IS – concrete IDEAS?

SIAM-IS Berlin 2022

Contacts

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2020 SIAG/IS BUSINESS MEETING

at the **Technische Universität Berlin (TU Berlin)**

co-organized by

the **Humboldt Universität zu Berlin**

and

Weierstrass Institute for Applied Analysis and Stochastics (WIAS)



TU Berlin including the MATH building is in the center of Berlin within walking distance to the Kurfürstendamm and the Brandenburger Tor. The building is a symbiosis of a reconstructed historical part and a modern one.

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Date: March 23 to 26, 2022

Local Organizing Committee (so far):

G. Kutyniok, T. Schäffter, G. Steidl (TU Berlin),
M. Hintermüller (Humboldt-Univ. zu Berlin, Weierstrass Institute),
G. Teschke (Neubrandenburg Univ. of Applied Sciences).

Facilities at TU Berlin:

- ◆ One of four largest universities in Berlin, 36,500 students, 90 subjects.
- ◆ 2019 almost 27% of international students were enrolled.
- ◆ University alumni and professor list include seven Nobel Prize winners



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- ◆ Institute of Mathematics: 35 Professors
- ◆ Part of the cross-institutional and transdisciplinary Cluster of Excellence **MATH+** funded by the DFG since January 2019 (first period: 7 years).

Joint project of the three major universities Freie Universität Berlin, Humboldt-Universität zu Berlin, and Technische Universität Berlin as well as the Weierstrass Institute for Applied Analysis and Stochastics (WIAS) and the Zuse Institute Berlin (ZIB).



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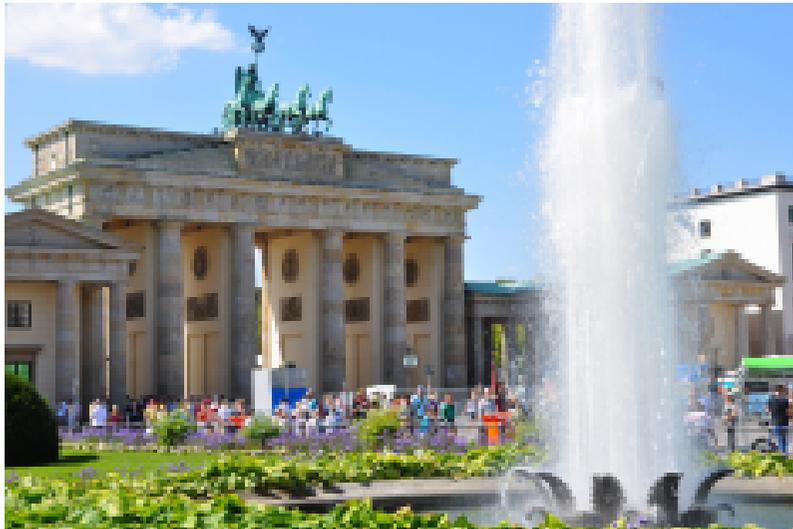
Visiting Berlin

Berlin is a modern and multi-cultural city, where high-tech firms and research facilities are at the core of its economy, and nearly everybody speaks English.

It has a population of 3.5 million people, 137,297 beds in hotels, and about 4,650 restaurants.

Besides the big tourist attractions Berlin has a lot of lovely small places.

Berlin is a city with small rivers and lakes. (Berlin has more canals than any other city in the world, connected by a staggering 1,700 bridges, in comparison to 409 in Venice.)



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Next Steps:

- ◆ Fixing the Contracts with SIAM
- ◆ Establishment of a Program Committee and Invitation of 7 Plenary Speakers
- ◆ Advertisement (by SIAM?)

Thanks to Fiorella Sgallari (University of Bologna) for encouraging and helping us with preparing the first steps towards a successful conference.

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