

CCC'26 Business Meeting

Shachar Lovett, CCF President

August 3, 2026

Agenda

- CCC 2026:
 - PC & LA reports
 - Travel awards report
- CCC 2027:
 - PC & LA
- CCC 2028:
 - Hosting bids and Q&A
- CCF matters
 - Treasurer report
 - Changes to the CCF board
- Other business

CCC 2026

- **PC report:** Dana Moshkovitz
- **LA report:** Bruno Loff
- **Travel awards report:** David Zuckerman

CCC 2027: Program Committee

Divesh Aggarwal

Gil Cohen

Anna Gal

Uma Girish

Rahul Ilango

Gillat Kol

Swastik Kopparty (PC chair)

Nutan Limaye

Ian Mertz

Dor Minzer

Ashwin Nayak

Igor Carboni Oliveira

Robert Robere

Till Tantau

CCC 2027: Local Arrangements

- **Location:** University of Washington, USA
- **Dates:** July 19-22, 2027
- **LA team:** Paul Beame, Anup Rao

CCC 2028: Hosting Bids

- **Ohio State University:** Zeyu Guo, Pooya Hatami
- **Cornell:** Eshan Chattopadhyay, Sasha Golovnev, Noah Stephens-Davidowitz

CCF Matters

- **Treasurer report:** Mahdi Cheraghchi

CCF Matters



Shachar
Lovett
President
'24-'27



Mahdi
Cheraghchi
Treasurer
'23-'26



Raghu
Meka
Secretary
'24-'27



David
Zuckerman
Awards Chair
'25-'28



Pooya
Hatami
Budget Chair
'25-'28



Susanna
de Rezende
Paper Chair
'23-'26



Antonina
Kolokolova
Registration Chair
'24-'27



Benjamin
Rossman
Past Awards Chair
'25-'26



Shubhangi
Saraf
Past Budget Chair
'25-'26

Leaving the board:

- Mahdi Cheraghchi (treasurer)
- Susanna de Rezende (paper chair)
- Raghu Meka (secretary)
- Benjamin Rossman (past awards chair)
- Shubhangi Saraf (past budget chair)

Joining the board (2026-2029):

- Eshan Chattopadhyay (treasurer)
- Joshua Grochow (paper chair)
- Jiapeng Zhang (secretary) (2026-27)

Other business

- [TheoretiCS](#) (Nutan Limaye)
- Test of Time Award
- Pre-recording of talks by authors
- More papers at CCC?
- Larger PC, allow PC submissions?
- Anything else?

Thank you!

Enjoy the rest of the conference!

Computational Complexity Conference 2026 Chair Speech

Dana Moshkovitz
The University of Texas at Austin

----- Forwarded message -----

From: **Shachar Lovett** <shachar.lovett@gmail.com>

Date: Mon, Feb 3, 2025 at 2:16 PM

Subject: CCC'26 PC chair?

To: Dana Moshkovitz <danama@utexas.edu>

Hi Dana,

I hope all is well. I am the president of CCF, which is the steering committee for CCC. We would like to invite you to be the PC chair for CCC'26, which will take place in Portugal. Your service would be much appreciated by the conference and the complexity community. Please let me know soon if you have any questions and/or whether you can do it. I hope that you will agree.

Best,
Shachar

What The \$%@* Were They Thinking!?

$$\begin{array}{l} \text{My success} \\ \text{rate as CCC} \\ \text{author over} \\ \text{the last 20} \\ \text{years} \end{array} = \frac{\text{\#acceptances}}{\text{\#submissions}}$$

What The \$%@* Were They Thinking!?

$$\begin{array}{l} \text{My success} \\ \text{rate as CCC} \\ \text{author over} \\ \text{the last 20} \\ \text{years} \end{array} \leq \frac{3}{10}$$

... Usually PC Chairs Have *Higher Than Average* Acceptance Rate...

My success
rate as CCC
author over
the last 20
years

<

CCC
acceptance
rate

The CCC'26
acceptance rate was
 $42/126=1/3$.

....But it was an offer I couldn't refuse...

I can manage. I chaired committees at UT. I served on 8 PCs, including the CCC'13 PC.

Seeing the 30% full glass. I had 3 CCC papers → I came to CCC'24 and CCC'25.

My friends and students like CCC. I can talk to them about CCC. I can recruit PC members who understand CCC.

The CCC Bylaws

- “The Program Committee should exhibit diversity, including but not limited to:
 - research areas within computational complexity theory,
 - academic age,
 - experience on previous committees (i.e. both people with and without experience
 - affiliation, and
 - nationality and gender.”



COMPUTATIONAL COMPLEXITY FOUNDATION

Bylaws

Amended February 17, 2021

Table of Contents

I. Object	VIII. Program Committee
II. Structure	1. Power and Duties
III. Members	2. Composition
1. Power and Duties	3. Selection
2. Ex Officio Members	4. Meetings
3. Dues Paying Members	IX. Standing Committees
4. Meetings	1. Power and Duties
IV. Board of Trustees	2. Composition
1. Power and Duties	3. Budget Committee
2. Composition	4. Paper Committee
3. Terms of Office	5. Awards Committee
4. Selection of New Trustees	6. Registration Committee
5. Meetings	X. Code of Conduct

The Program Committee

- [Scott Aaronson](#), The University of Texas at Austin
- [Mitali Bafna](#), University of Washington
- [Lijie Chen](#), UC Berkeley
- [Karthik C.S.](#), Rutgers University
- [Dean Doron](#), Ben-Gurion University
- [Mika Göös](#), EPFL
- [Tom Gur](#), University of Cambridge
- [Pavel Hrubeš](#), Institute of Mathematics, Czech Academy of Sciences
- [Dana Moshkovitz](#) (Chair), The University of Texas at Austin
- [Jakob Nordström](#), University of Copenhagen and Lund University
- [Ben Rossman](#), Duke University
- [Makrand Sinha](#), University of Illinois at Urbana-Champaign
- [Nitin Saxena](#), IIT Kanpur
- [Ronald de Wolf](#), CWI, University of Amsterdam and Google research

My rule of thumb:

Load = #reviews/#PC < 30.

Scott and Makrand joined after we had **126 submissions** (~25% more than usual).

Submissions by topic:

Quantum= 27

Circuits, algebra= 25

Structural complexity= 19

Randomness= 17

Query complexity= 11

Proof complexity= 9

Hardness of approximation= 7

Codes= 7

Communication complexity= 3

Acknowledgements

Board of Trustees



Shachar
Lovett
President
'24-'27



Mahdi
Cheraghchi
Treasurer
'23-'26



Raghu
Meka
Secretary
'24-'27



David
Zuckerman
Awards Chair
'25-'28



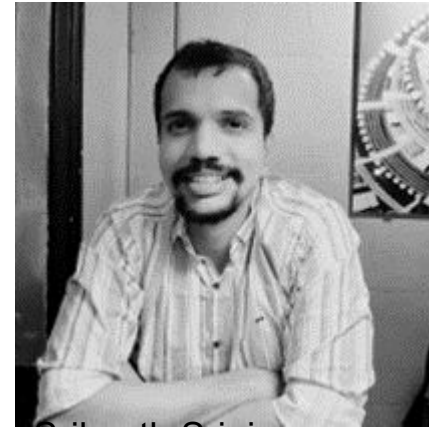
Pooya
Hatami
Budget Chair
'25-'28



Susanna
de Rezende
Paper Chair
'23-'26



Antonina
Kolokolova
Registration Chair
'24-'27



Srikanth Srinivasan
CCC'25 PC Chair



Dr. Michael Didas

✉ michael.didas@dagstuhl.de



Benjamin
Rossman
Past Awards Chair
'25-'26



Shubhangi
Saraf
Past Budget Chair
'25-'26

What I Aspired To: No Mistakes.

We had to make *many* decisions. I'm sure that we made mistakes, at least in the eyes of some experts. What I tried to **eliminate** was issues **falling through the cracks**, e.g.,:

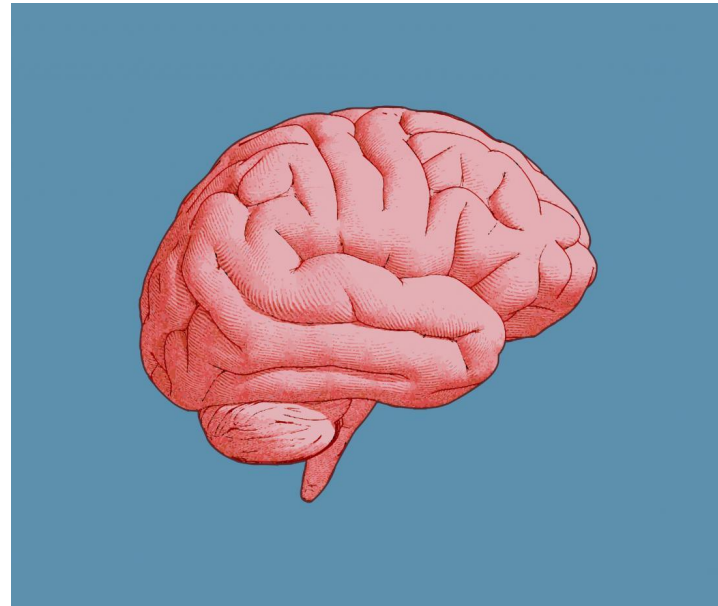
- Papers that do not get *thoroughly reviewed* or *discussed* by *relevant experts*.
- Miscalibration across areas or PC members.
- Ethical issues that are avoided rather than handled properly.

My Approach: The PC Chair is The Collective Brain of The PC

The PC members give the **input**. The PC members make the **decisions**.



My job is to **get** the opinions of relevant PC members; **process** them; **reflect** them; **respond** to them;



Procedures

- The papers were *anonymized*. All the decisions were made *offline* so everyone had time to think.
- I had simple and clear asks of PC members on HotCRP (public) or in email (private). I adapted to PC members' different levels of engagement.
- Rather than votes, I asked for messages with explanations, including whatever information each PC member wanted to convey.
- I emailed the entire PC periodically, summarizing the input I got.
- I always made sure to introduce delays between a decision and its implementation, explicitly giving PC members time to object to any decision made.

The Program

- **Day 1:** Randomness; Structural complexity x 2; Proof complexity.
- **Day 2:** Algebra; Query and communication complexity; Quantum; Inapproximability (including in structural complexity).
- **Day 3:** Codes; Algebra; Tensors; Quantum.
- **Day 4:** Randomness; More lower bounds; Algebra (short session).

The Best Student Paper

Randomized separations in black-box TFNP

by Fyodor Kiselyov (Moscow Institute of Physics and Technology)

*This paper gives a new general method for showing, for a pair of classes A, B , that there is no **randomized** reduction from A to B , and applies this to several natural TFNP classes where previously only a deterministic lower bound was known.*

The Best Paper

A weak regularity lemma for polynomials

by Guy Moshkovitz (CUNY) and Dora Woodruff (MIT)

This paper defines “weak independence” of a set of polynomials, and shows that any set of m polynomials of degree at most d has a decomposition in terms of weakly independent polynomials. The number of polynomials is a modest function of m and d , compared to the towers of exponentials usually seen in regularity lemmas.

The Special Issue

Strong Inapproximability of Monotone Circuit Size and Hardness of Monotone Learning under Worst-case Assumptions.

By Bruno Cavalar, Susanna de Rezende, Matthew Gray, Rahul Santhanam.

This paper proves new inapproximability results for learning monotone formulas by monotone circuits based on a standard worst-case assumption (randomized exponential time hypothesis). Previous work had cryptographic or average case assumptions.

Quantum–Classical Equivalence for AND-Functions.

By Sreejata Kishor Bhattacharya, Farzan Byramji, Arkadev Chattopadhyay, Yogesh Dahiya, Shachar Lovett.

This paper shows that deterministic and quantum two-way communication complexities are polynomially related for every AND-function. It represents some of the only undeniable progress in years on one of the central open problems in quantum communication complexity.

The Special Issue

Hardness of Computing Nondeterministic Kolmogorov Complexity.

By Jinqiao Hu, Zhenjian Lu, Igor Oliveira.

This paper shows that computing nK^t (the version of time-bounded Kolmogorov complexity where programs are allowed to use non-determinism) is NP-hard. Proving the same without non-determinism is a major open problem.

Frontier Space-Time Algorithms Using Only Full Memory.

By Petr Chmel, Aditi Dudeja, Michal Koucký, Ian Mertz, Ninad Rajgopal.

The paper shows a catalytic algorithm for the fundamental problem of directed st-connectivity. The lowest space algorithm known uses $n/2^{\sqrt{\log n}}$ space. This paper converts it to an algorithm that uses logarithmic space and $n/2^{\sqrt{\log n}}$ catalytic space (whose information needs to be restored).

Multiplicative Pseudorandom Generators For Nondeterministic Circuits.

By Alon Dermer, Ronen Shaltiel.

This paper constructs optimal multiplicative pseudorandom generators against nondeterministic constructions based on standard nondeterministic hardness assumptions. Pseudorandom generators are usually defined with an additive error, but there were impossibility results for the same theorem with additive error, and multiplicative error is essentially as good for derandomization.

What Went Wrong

- Made mistakes setting up HotCRP (interface could be better, lots of options, evolving)
 - need to add “topic” and “student paper?”
 - HotCRP default: submissions invisible to PC before deadline.
 - Multiple ways to approve/adopt sub-reviews.
- I planned to read all the submissions but ended up only reading ~30%.
- We were missing most reviews more than a week past the review deadline.
 - Because of the STOC deadline. I left enough time margins. Eventually we got to 100% reviews.
- I didn't give enough instructions to the PC in the beginning,
 - because I was still figuring things out. I tried to give enough information as we went.
- Took me a while to learn to use HotCRP:
 - How to approve flagged conflicts.
 - How to color code (#red for reject, #green for accept, two colors for tentative decisions).
 - I still do not know how to extract the list of reviewers from HotCRP easily.
- Time-zone differences between US/Europe/Asia: an advantage, but also a synchronization challenge (I didn't realize until the end).

LLMs and CCC

Disclaimer: I don't use LLMs enough to tell if text is written by LLM

- There was a handful of nonsense papers (P vs. NP etc), possibly a little more than usual?
- One PC member thought that one review was written by LLM.
 - I decided to let it slide because I felt like the paper had other credible reviews. Content-free reviews are unfortunate but have always happened.
- One author of a rejected paper complained about a negative review, speculated it may have been written by LLM.
 - The reviewer wrote his opinion as a “PC only” comment. I communicated this to the author. While we strive to give useful feedback to the authors, non-useful feedback has always happened.

Report of the Local Organizing Committee

Bruno Loff
João Ribeiro
Diogo Poças

Registration stats

- This year: 74 registrants + 2 guests
 - CCC 2025 - 78
 - CCC 2024 - 75
 - CCC 2023 - 84
 - CCC 2022 - 71
- 38 students
- 36 non-students

Finances

- Total registration fees collected = EUR 18,240 ~= 21k USD
- Sponsorship from Turismo de Lisboa (visitlisboa.com) = EUR 2000
- Total: ca 20000

- Local expenses:
 - Admin support - ca 2500
 - Rooms and gear - ca. 3000
 - Coffee & Lunch - ca. 6800
 - Misc - ca. 500
 - Total: 12800

- Total anticipated expenses:
 - Ca. 5000 EUR publication of proceedings, easychair and insurances
- Grand total ca 18000

Report on CCC 2026 Travel Awards

David Zuckerman
University of Texas at Austin
Awards Chair

NSF Student Travel Award

- \$23,400 NSF student travel grant recommended for award on June 24, 2026, and awarded on July 21.
- Limited to students *currently enrolled at U.S. institutions*
- Eligible expenses: airfare, accommodations, registration fee
- **7** eligible applications, **7** awards, total **\$9900**
 - Each awardee but one has a paper in conference
 - Advertised application late.
 - Hopefully can carry over funds for CCC 2027.
- I was rushed and made decisions myself. Next year I will form a committee.

CCC 2027 in Seattle



CCC 2027 in Seattle

Local arrangements chair

- Anup Rao

Dates

- Monday-Thursday July 19-22

Venue:

- University of Washington Allen School
 - Gates Center for CSE



Main talks venue



Reception area & breakouts



Estimated Costs

- **Registration fees:**

- Depends on projected attendance and # of lunches provided
- Ballpark:
 - \$350 regular, \$200 student at 2025 prices.

- **Hotels:** 4 are close to campus & walking distance from light rail

1-year-out tax-included booking prices for July 18-23:

	Hotel Site	Other site w/Cancellation
Watertown	\$260	\$230
University Inn	\$282	\$273
Graduate	\$243* (*end of June)	\$222
Residence Inn	\$255* (*prior week)	\$260 with breakfast

Travel

- Non-stop flights from
 - Europe and Middle East:
 - London, Paris, Amsterdam, Frankfurt, Rome, Copenhagen, Barcelona, Reykjavik, Dublin, Zurich, Munich, Helsinki, Istanbul, Doha, Dubai
 - Asia:
 - Tokyo, Seoul, Beijing, Hong Kong, Shanghai, Taipei, Singapore
- \$3 light rail from airport to University District

Seattle



Further afield

- Cascade Mountains Hiking/Rock Climbing
- Mount Rainier
- Puget Sound & San Juan Islands
- Olympic Peninsula & Pacific coast
- Mount St. Helens
- Alaska cruises

The background of the slide is a scenic photograph of Mount Rainier, a large snow-capped mountain, rising above a dense forest of evergreen and deciduous trees. The trees in the foreground show vibrant autumn colors in shades of yellow, orange, and red. The sky is a clear, pale blue. On the left side, there are several diagonal, semi-transparent blue stripes. In the top right corner, the text 'UNIVERSITY of WASHINGTON' is written in a purple serif font. In the top left corner, a large, bold, purple 'W' is partially visible.

W

UNIVERSITY *of* WASHINGTON

CCC 2027 in Seattle

CCC 2028 at Cornell

Ithaca, New York — July/Aug 2028 (TBD)



Ithaca

- Set above Cayuga Lake, in the heart of the Finger Lakes
- Surrounded by gorges, waterfalls, parks, and waterfront trails
- Beautiful, walkable, and welcoming



Complexity at Cornell

- Cornell has a distinguished history in theoretical computer science, including the foundational work of **Juris Hartmanis** and **John Hopcroft**
- Today, theory research at Cornell includes **computational complexity, pseudorandomness, cryptography, algorithms, and coding theory**
- Continues to support a broad and active theory community

Current Faculty

- | | | |
|-----------------------|--------------------|----------------------------|
| • Jayadev Acharya | • Michael Kim | • Alexandra Silva |
| • Sid Banerjee | • Jon Kleinberg | • Nicholas Spooner |
| • Eshan Chattopadhyay | • Robert Kleinberg | • Noah Stephens-Davidowitz |
| • Alex Conway | • Dexter Kozen | • Eva Tardos |
| • Alexander Golovnev | • Rafael Pass | • David Williamson |
| • Justin Hsu | • David Shmoys | |

Venue & Facilities

- Primary lecture hall (100-150 capacity)
- Overflow and breakout rooms
- Poster session space
- Professional AV and recording support



Accommodation

- **On campus: The Statler Hotel** — Located directly on Cornell's campus, adjacent to the conference venue. Approximately **\$200–\$325/night**
- **Downtown / Ithaca Commons** — Numerous restaurants, shops, and bars, with convenient bus access to Cornell. **Ithaca Marriott, Hilton Garden Inn, Hotel Ithaca, Canopy by Hilton, many more.** Approximately **\$150–\$300/night.**
- **Airport / North Ithaca** — More economical options with bus access to campus, including **Courtyard by Marriott and Homewood Suites.** Approximately **\$120–\$220/night.**

Travel to Ithaca



Flights

- **Direct Flights to Ithaca**
 - NYC (JFK) , ~1 hour 35 minutes
 - DC (IAD) to Ithaca, ~1 hour 30 minutes
- **Other close airports with many other connections**
 - Syracuse (SYR), ~1 hour drive to Ithaca
 - Rochester (ROC), ~1 hour, 45 minutes



Car

- 3 hrs 40 mins from Newark, NJ
- 4 hrs 30 mins from JFK, NY
- 4 hrs from Philadelphia, PA
- 5 hrs 30 mins from Pittsburgh, PA
- 5 hrs 40 mins from Boston, MA



Summers in Ithaca

- Gorges and waterfalls throughout town and campus
- Cayuga Lake, parks, hiking, and waterfront activities
- Plenty of restaurants and bars
- Finger Lakes wineries and countryside nearby



Registration target

- **Estimated regular registration:** approximately \$400
- **Reduced student rate**
- **Student travel support, subject to funding availability**

Local Arrangements

Local Organizing team:

Eshan Chattopadhyay

Alexander Golovnev

Noah Stephens-Davidowitz

+Graduate student volunteers

**+ coordination with Cornell
administration**

See you in Ithaca!

Strong intellectual fit with CCC — strong, active, fun local theory group

Memorable summer location — Ithaca's gorges, waterfalls, and long summer evenings

Compact, workable campus venue — lecture hall, breakout rooms, and full AV support

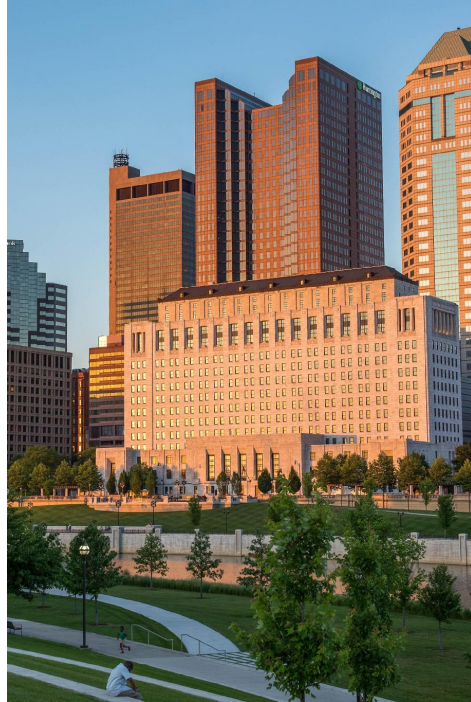
Easy to reach — regional airports from 15 minutes to 1.5 hours away

Affordable accommodation options

Experienced local team — Cornell organizers and graduate student volunteers

CCC 2028 in Columbus





Why Columbus?

- CCC has never been held in Ohio
(Although Ohio has its own CCC:
Columbus, Cincinnati, Cleveland 😊)
- Columbus — centrally located,
easy to reach
- Home to Ohio State University
- On campus — talks, housing,
dining all close





Basic Info

Place: Ohio State University, Columbus, Ohio

Dates: July 26-29, 2028 (flexible)

Local Arrangement: Zeyu Guo & Pooya Hatami

Registration fee: \$280 (\$200 for students)

Include coffee/tea + boxed lunch

Travel



By Air: John Glenn Columbus International Airport (CMH)

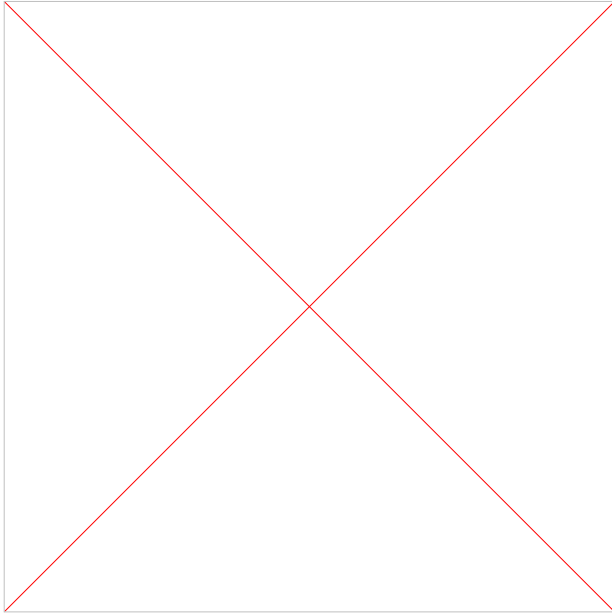
- Direct flights from major U.S. cities
- ~15 minutes drive from OSU



By Car: Centrally located in the Midwest
~3h: Pittsburgh, Indianapolis, Detroit/Ann Arbor

~6h: Chicago, Washington D.C.





Regional TCS Presence

Columbus is within driving distance of several universities with active theory groups:



~3 hours

- University of Michigan
- Carnegie Mellon University



~4–5 hours

- Purdue University
- Penn State
- UIUC
- University of Chicago

Accommodation



The Blackwell Inn (on campus)

- Recommended hotel, group rate around \$175



Additional nearby options:

- Hyatt House Columbus, Jungle House, etc.
- Roughly within a 30-minute walk

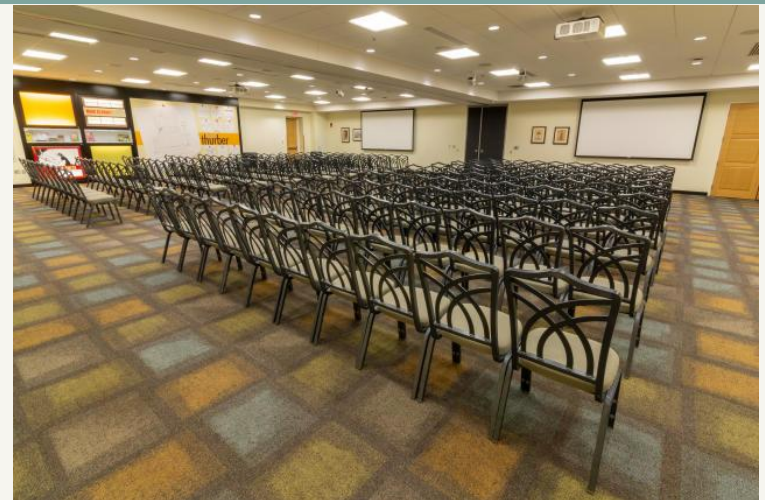


Venue



Ohio Union, Cartoon Room

- Capacity: 130+ (theater style) or ~90 with desks
- Located next to High Street restaurants and bars
- On campus, within walking distance of major OSU venues



After the Talks

Places to visit in Columbus:

- 📍 Short North Arts District
(Cafés, galleries, nightlife...)
- 📍 German Village
- 📍 Scioto Mile
- 📍 Ohio Stadium



**SEE YOU IN
COLUMBUS!**



Treasurer's report CCC 2026

Mahdi Cheraghchi

Treasurer's report

- Funds in CC Foundation account:
 - June 30, 2023 \$57,878 (before CCC 2023 income and expenses)
 - June 30, 2024 \$57,329 (before CCC 2024 income and expenses)
 - June 30, 2025 \$59,451 (before CCC 2025 income and expenses)
 - July 31, 2026 \$65,128.61 (before CCC 2026 income and expenses)
 - STABLE

In a nutshell

- Special expenses
 - Luca Trevisan Award for the Best Student Paper, prepaid to us by EATCS (no award in 2023, one in 2024, 2025, 2026)
 - 2025 Student Travel Awards (12 by Fields Institute, 5 from registration fees): Total CAD 16,000.
- Recurring expenses
 - \$839 Board liability insurance
 - CCF website hosting (3-year contract, \$831.64 paid in 2024)
 - CCF domain registration (5-year contract, \$115.85 paid in 2025)
 - \$63 New Jersey tax filing + NJ charity registration
 - EasyChair fee, HotCRP in 2025 (\$772 for CCC 2024, \$683 for CCC 2025, TBD for CCC 2026)
 - Proceedings fee (\$2,791 for CCC 2025, \$2,475.31 for CCC 2024, TBD for CCC 2026)
- Thanks to:
 - European Association for Theoretical Computer Science (student paper award)
 - NSF for CCC 2026 Student Travel Awards (awarded to David Zuckerman)
 - Fields Institute for CCC 2025 (for free room and coffee, and CAD 10,000 for travel awards)
 - Eshan Chattopadhyay for taking over the Treasurer's role (Welcome!)

An update at CCC 2026

Introduction and Process

- (Diamond) Open-access journal for all of TCS
- Aims at very high quality
- Very strong Editorial Board
- Editors-in-Chief:
 - Shuchi Chawla ("Track A")
 - Anca Muscholl ("Track B")
- Community project involving all major TCS conferences
 - CCC-representative at TheoretiCS:
 - Nutan Limaye
- theoretics-journal.org

Introduction and Process

- (Diamond) Open-access journal for all of TCS
- Aims at very high quality
- Very strong Editorial Board
- Editors-in-Chief:
 - Shuchi Chawla ("Track A")
 - Anca Muscholl ("Track B")
- Community project involving all major TCS conferences
 - CCC-representative at TheoretiCS:
 - Nutan Limaye
- theoretics-journal.org

2-phase Editorial process

- Phase 1 considers significance and lasting value of the results (~ 3 months)
- Phase 2 focusses on validity and presentation
- Usually, articles in phase 2 are eventually accepted
- Rejections of papers are usually within 3 months

Recent updates

- Suchi Shawla replaced Uri Zwick as EiC
 - Antoine Amarilli replaced Meena Mahajan as secretary general
 - TheoretiCS is now listed at SCOPUS
 - First cite scores are ok'ish, but are unfavourably impacted by the fact that 80% of published articles are from 2024-25 and only 20% from 2022-23
 - Application for funding for 2027-2029 from the KOALA project by the German National Library of Science and Technology
- **Looking for volunteers**
 - managing editors (starting 2027)
 - layout editors (starting whenever)
 - a publicity chair (new role)
 - a treasurer (starting 2027)
 - a LaTeX wizard (starting whenever)
 - contact@theoretics-journal.org

Some statistics (as of June 30, 2026)

Status	2021	2022	2023	2024	2025	2026
Published articles		2	12	26	29	10
Submissions	7	52	42	62	61	41
Accepted (by year of submission)	1	23	17	34	10	0
Awaiting decision (by year of submission)	0	0	0	2	15	20