

# COMPUTATIONAL COMPLEXITY FOUNDATION

# Proceedings of the 2022 Business Meeting

**Date:** July 20, 2022, 18:00–19:00 EDT **Location:** Philadelphia, PA, USA

Chair: Valentine Kabanets, President of CCF

**Scribe:** Valentine Kabanets (in lieu of Amit Chakrabarti, Secretary of CCF, who could not attend). Subsequent edits by Amit Chakrabarti. Minutes reviewed by the chair and approved by

the board.

### Agenda:

#### CCC 2022

- Program Committee (PC) Report and Awards
- · Local Arrangements (LA) Report
- Travel Awards Report

#### CCC 2023

PC & LA

#### CCC 2024

- Hosting bids
- Q&A

#### **CCF** matters

- · Special issue journal bids
- Treasurer Report
- · Changes to the CCF Board

Other business

### Convention for attributing quotes:

- C: Chair
- S: Speaker for the topic (indicated if other than the Chair)
- O: Other participant

### **Initial Remarks**

C: Welcome to the first in-person conference and business meeting after a long COVID-reated pause! We have a packed agenda, so let's start with the PC report.

## CCC'22 PC Report and Awards

Speaker: Shachar Lovett, Program Committee Chair for CCC'22

- Thanks to the PC members: Benny Applebaum, Eshan Chattopadhyay, Gil Cohen, Johan Håstad, Antonina Kolokolova, Pravesh Kothari, Mrinal Kumar, Marvin Kunnemann, Shachar Lovett, Nitin Saxena, Osamu Watanabe, and John Wright
- Overview of the process
  - o 90 submissions (last year 110), from 20 countries
  - 153 distinct sub-reviewers: thanks to all sub-reviewers!
  - o 10.5 weeks from the submission deadline to the notification date
  - o 2 days for paper bidding and 1 day for paper assignment
  - o 6 weeks for reviews/subreviews to be turned in
  - 3.5 weeks for online discussions and gradual assignment of "accept/reject"
  - Online PC meeting to make final decisions
  - 4 days to clean up reviews
- Acceptance rate
  - 90 submissions, 38 accepted (42%)
  - Comparison with past years:

2021:	41 / 110	(37%)
2020:	38 / 99	(38%)
2019:	32 / 98	(33%)
2018:	28 / 74	(38%)
2017:	33 / 98	(34%)
2016:	34 / 91	(37%)
2015:	30 / 110	(27%)
2014:	29 / 94	(31%)
2013:	29 / 90	(32%)
2012:	34 / 119	(29%)

• Strong submissions.

• Submissions and acceptance rate by country

country	authors	submitted •	accepted	acceptance rate	PC members
United States	76	34.50	16.63	0.48	5
India	18	6.40	1.75	0.27	1
Israel	14	7.50	3.17	0.42	2
Canada	11	3.46	3.13	0.90	1
China	11	6.42	0.67	0.10	-
United Kingdom	8	3.14	1.14	0.36	-
France	7	1.73	1.33	0.77	-
Germany	6	5.33	1.00	0.19	1
Netherlands	6	2.00	1.00	0.50	-
Russia	6	3.33	2.33	0.70	-
Switzerland	6	1.43	0.76	0.53	-
Czechia	5	3.67	1.67	0.45	-
Singapore	4	1.33	0.00	0.00	-
Denmark	3	1.92	0.92	0.48	-
Hong Kong	2	0.50	0.50	1.00	-
Japan	2	2.00	2.00	1.00	1
Poland	2	1.33	0.00	0.00	-
Sweden	2	1.00	0.00	0.00	1
Iran	1	1.00	0.00	0.00	-
Kenya	1	1.00	0.00	0.00	-

- Best paper award: Scott Aaronson (UT Austin), Devon Ingram (U. Chicago), and William Kretschmer (UT Austin) for "The Acrobatics of BQP." Congratulations!
- Best student paper awards:
  - o Oliver Korten (Columbia) for "Derandomization from Time-Space Tradeoffs."
  - Xin Lyu (Berkeley) for "Improved Pseudorandom Generators for AC0 Circuits."
    Congratulations!
- Many thanks to all the authors who submitted; the program committee; the subreviewers; the CCF Board of Trustees; Anindya De for the local arrangements; Dean Doron, Rahul Santhanam and Gilles Zemor for the invited talks; Michael Wagner and Meena Mahajan for the proceedings; and to all the attendees!

C: Thanks to Shachar and the PC!

## CCC'22 Local Arrangements Report

Speaker: Anindya De, Local Arrangements Chair for CCC'22

- 71 attendees: 36 students, 35 regular attendees. Somewhat lower compared to previous years: CCC 2019 had 96 attendees.
- Total cost of the conference: \$13,220 + cost of housekeeping ≤ \$14,000.
- The venue was available to us at no cost (by CIS@Penn).
- Conference hotel was available at \$192.00 + taxes. No attrition fee incurred. Tradeoff: Potentially cheaper hotel for the attendees but risk on part of the conference.
- Huge thanks to the CIS staff: Cheryl Hickey and Ally Moraschi. Nearly every aspect of the organization was done by them.
- Thanks to the student volunteers: Natalie Collina, Eshwar Arunachaleshwaran, and Chris Watson.

## CCC'22 Travel Awards Report

Speaker: Ryan Williams, Awards Chair for CCF

### Overview

- Source of travel funding: \$10k NSF grant from 2019 (Rocco Servedio, Columbia). Tried to apply for another travel grant, but was asked to withdraw the application throughout the pandemic.
- Some years CCF has gotten \$15K (e.g., when CCC is held in Europe). Travel costs are clearly higher now than they used to be; we could not meet the student demand
- The next Awards chair should apply for \$15k?

#### NSF Travel Awards

- Proposal "requests NSF support to assist students in traveling to attend the 2019 Computational Complexity Conference." Aim is to support
  - students from under-represented groups
  - student authors
  - students (grad/undergrad) who don't have a paper
  - other students (their first CCC, limited advisor funding, etc)
- Funds limited to travel support: economy class airfare, hotel at double occupancy for 4-5 nights, early registration fee, local ground transportation.
- Funds *only* available to **students** at **US universities**. We would presumably need other funding sources beyond NSF, to support students from non-US universities and/or postdocs. Example: CCC 2019 at Rutgers got funding from DIMACS for this purpose.

- Application process
  - June 8 deadline, June 15 notification
  - Lightweight application: basic info, anticipated expenses, brief statement of interests, advisor statement
  - Applications from US institutions eligible for NSF funding were reviewed by a 3person committee of CCF board members
- Application outcomes
  - Applicants from US Institutions
    - 12 applications
    - All 12 were awarded at least \$500 of funding (NSF).
    - We tried to "spread" the \$10k we had, according to student needs
    - 2/13 funded applicants are women/under-represented
    - 6/12 funded applicants have a paper at CCC 2022
  - Applicants from non-US Institutions
    - 3 applications, but unfortunately we could not fund them.
- Thanks to: NSF (Tracy Kimbrel) for their generous support; Oana Moldoveanu (Rocco's admin at Columbia University) for handling reimbursements; CCF secretary Amit Chakrabarti (and former secretary Ashwin Nayak) for setting up the travel allowance application system; and the members of the CCF award selection committee.

# CCC'23 Program Committee

- PC chair: Amnon Ta-Shma
- PC members: Eli Ben-Sasson, Andrej Bogdanov, Lijie Chen, Alex Grilo, Mika Göös, William Hoza, Susanna F. de Rezende, Neeraj Kayal, Tali Kaufmann, Raghu Meka, Francois Le Gall
- The timeline will be similar to that of CCC 2022

### CCC'23 Local Arrangements

Speaker: Valentine Kabanets on behalf of Tom Gur, Local Arrangements Chair for CCC'23

- CCC 2023 will be held at Warwick, UK
  - o Dates: July 18 –20, 2023
  - Venue: The University of Warwick
  - Talks, accommodation, and meals on campus
  - Registration fee: £120 for students, £200 for regular attendees.
  - Local arrangements: Artur Czumaj, Tom Gur (Chair)

- Travel and Accommodation
  - Location: 20–25 minutes from Birmingham Airport, 1.5 hours from London.
  - There are 6+ airports in the nearby area.
  - There are various accommodation/hotel options on campus.
- Things to do
  - Castles and historical sites
  - Shakespeare birthplace and Royal Shakespeare Theatre
  - Classic English countryside

### CCC'24 Bids and Discussion

C: Ann Arbor was a bid last year and Mahdi Cheraghchi kindly agreed to resubmit the bid again this year. No other bids were formally submitted this year.

### Bid for Ann Arbor, Michigan, USA

(University of Michigan) Speaker: Mahdi Cheraghchi

- CCC 2024 in Ann Arbor
  - Venue: University of Michigan central campus, Michigan League
  - Beautiful, historic building, with lots of rooms for talks, refreshments, reception; beautiful garden
  - Local arrangements: Mahdi Cheraghchi, Euiwoong Lee
  - Dates: July 13 15, 2024 (but flexible)
  - Reception on July 14, and possibly workshop
  - Estimated registration fee: \$250 for students, \$350 for others; includes catered breakfast / lunch, coffee breaks, reception dinner
- Why Michigan?
  - o CCC in the Midwest: Chicago (2001, 1991), Minneapolis (1995), Buffalo (1998)
  - Never been held in Michigan
  - Easy access, short drive from Detroit airport
  - Beautiful summers (long days: sunset > 9 PM)
  - Lots of great restaurants and summer activities (e.g., Art Fair, 3<sup>rd</sup> week of July)
- Travel
  - Detroit Metropolitan Airport (DTW)
    - 2<sup>nd</sup> largest Delta hub
    - 20 miles from Ann Arbor, less than 30 min drive
    - Lots of direct domestic and international flights
  - Easy drive from
    - Toronto (4 hours)
    - Pittsburgh (4 hours)
    - Chicago (3.5 hours); Amtrak as well
    - Lots of Midwest locations

- Accommodations
  - Lots of options
  - Examples:

Property	Rate per night (without tax)	Location
Holiday Inn	\$145 – \$170 (group rate ~ \$96)	North campus (too far?)
Graduate Ann Arbor	\$190 – \$260 (group rate ~ \$159 –\$169)	Next to Campus (closest)
Residence Inn by Marriott	\$189 – \$250 (group rate ~ \$179–\$218)	Downtown (10 min walk)
Hampton Inn Ann Arbor-South	\$139 – \$165	South – Briadwood (10 min drive/shuttle, 25 min bus)

- Hotels have shuttles
- Can bicycle
- Ann Arbor highlights
  - Ranked #1 Best College town (Forbes'18)
  - Downtown is a 10 min walk from campus
  - U-M: Stadium (largest in US, #3 in world); Museum of Art / Natural history;
    Botanical gardens / Arboretum
  - Ann Arbor Art Fair (3<sup>rd</sup> week of July)
- Hope to see you in Ann Arbor!

# CCC Special Issue Journal Bids

Three bids were presented for handling the special issue for selected CCC papers.

- 1. Bid for Theory of Computing, presented by Laci Babai
- 2. Bid for ACM Transactions on Computation Theory, presented by Ryan O'Donnell
- 3. Bid for Computational Complexity, presented by Peter Bürgisser

The decision on which bid to move ahead with will be taken at the CCF Annual Board Meeting (on July 21, 2022).

## **CCF Treasurer Report**

Speaker: Pierre McKenzie, Treasurer of CCF (All amounts in US\$)

- Balance on reserve fund
  - June 30, 2021: \$56,537, before CCC 2021 income and expenses
  - June 30, 2022: \$57,365, before CCC 2022 and before paying \$750 for 2021 best student paper
  - The fund is stable
- Income and expenses
  - o Income:
    - \$6 interest on bank deposit
    - \$1,500 for 2021 and 2022 best student paper awards (thanks to EATCS)
  - o CCC 2021 deficit
    - **\$664**
  - Recurring expenses:
    - \$755 Board liability insurance
    - \$216 CCF website hosting (3-year contract)
    - \$111 CCF domain registration (5-year contract, \$0 in 2021–22)
    - \$33 New Jersey tax filing
    - \$30 NJ charity registration to maintain non-profit status
    - \$31 OpaVote
- History of the reserve fund
  - o 2014: CCC left the IEEE
  - o 2014: \$21,000 from about 10 anonymous donors
  - o 2014: \$1,200 from EATCS
  - o 2015: \$30,000 from Microsoft
  - o 2016: \$1,000 from anonymous donor

# Changes to the CCF Board

- Outgoing officers:
  - Budget chair: Michal Koucký
  - Awards chair: Ryan Williams
  - Both will serve on board until next CCC
- Outgoing board members:
  - Venkatesan Guruswami, Ashwin Nayak, Ronen Shaltiel
- Incoming board members:
  - Budget chair: Shubhangi Saraf, University of Toronto, elected by CCF members
  - Awards chair: Benjamin Rossman, Duke University, appointed by the board
- Thanks to all past officers and board members for their service, and welcome to the new members!

Other Business: SafeTOC at CCC

Speaker: Natalie Collina

- S: CCC is committed to an inclusive conference experience. Any unwelcome advances or propositions of an intimate nature, harassment or discrimination would not be tolerated.
  - SafeToC is a group of volunteers formed to help prevent and combat harassment in the TOC community.
  - If you experience or witness discrimination, harassment or other unethical behavior at the conference, please reach out to the SafeToC advocates for CCC 2023 to seek advice and remedy:
    - o Natalie Collina (ncollina@seas.upenn.edu),
    - Tom Gur (tom.gur@warwick.ac.uk),
    - o Mary Wootters (<u>marykw@stanford.edu</u>).
  - For more information on SafeToc, check out <a href="http://safetoc.org/">http://safetoc.org/</a>.