Submission data for 2023 CORE conference ranking process
IEEE Conference on Computational Complexity

Tom Gur

Introductory Questions

Conference

Title: IEEE Conference on Computational Complexity
Acronym : CCC
Rank: A

Requested Rank

Rank: A*

Conference Details

Month: July
Publisher: LIPICS
Bi-annual: False
Multiconference: False
Component in a multi-conference or umbrella event: False
Colocated with other events: False
Alternative content: False

Proceedings Publishing Style

Proceedings Publishing: self-contained
Link to most recent proceedings: https://drops.dagstuhl.de/opus/portals/lipics/index.php?semnr=16243
Further details:

Most Recent Years

Most Recent Year

Year: 2023
URL: https://computationalcomplexity.org/
Location: Warwick, UK
Papers submitted: 90
Papers published: 38
Acceptance rate: 42
Source for numbers: https://computationalcomplexity.org/foundation/meeting-minutes/ccc22-business-meeting.pdf

General Chairs

Name: Ryan Williams
Affiliation: MIT
Gender: M
H Index: 42
GScholar url: https://scholar.google.com/citations?user=EnEiF7oAAAAJ&hl=en
DBLP url:

Program Chairs

Name: Amnon Ta-Shma
Affiliation: Tel Aviv University
Gender: M
H Index: 45
GScholar url:
DBLP url: https://dblp.org/pid/t/AmnonTaShma.html

Second Most Recent Year

Year: 2022
URL: https://computationalcomplexity.org/Archive/2022/program.php
Location: Philadelphia, PA, USA
Papers submitted: 110
Papers published: 41
Acceptance rate: 37
Source for numbers: https://computationalcomplexity.org/foundation/meeting-minutes/ccc22-business-meeting.pdf

General Chairs

Name: Ryan Williams
Affiliation: MIT
Gender: M
H Index: 42
GScholar url: https://scholar.google.com/citations?user=EnEiF7oAAAAJ&hl=en
DBLP url:

Program Chairs

Name: Shachar Lovett
Affiliation: UC San Diego
Gender: M
H Index: 31
GScholar url: https://scholar.google.co.il/citations?user=f6JF7BkAAAAJ&hl=en
DBLP url: https://dblp.org/pid/77/4422.html

Third Most Recent Year

Year: 2021
URL: https://www.computationalcomplexity.org/Archive/2021/cfp.php
Location: Toronto, Canada
Papers submitted: 99
Papers published: 38
Acceptance rate: 38
Source for numbers: https://computationalcomplexity.org/foundation/meeting-minutes/ccc22-business-meeting.pdf

General Chairs

Name: Venkatesan Guruswami
Affiliation: UC Berkeley
Gender: M
H Index: 58
GScholar url: https://scholar.google.com/citations?hl=en&user=Es6jE1kAAAAJ
DBLP url:

Program Chairs

Name: Valentine Kabanets
Affiliation: SFU
Gender: M
H Index: 22
GScholar url: https://scholar.google.com/citations?user=1UvY-OkAAAAJ&hl=en
DBLP url:

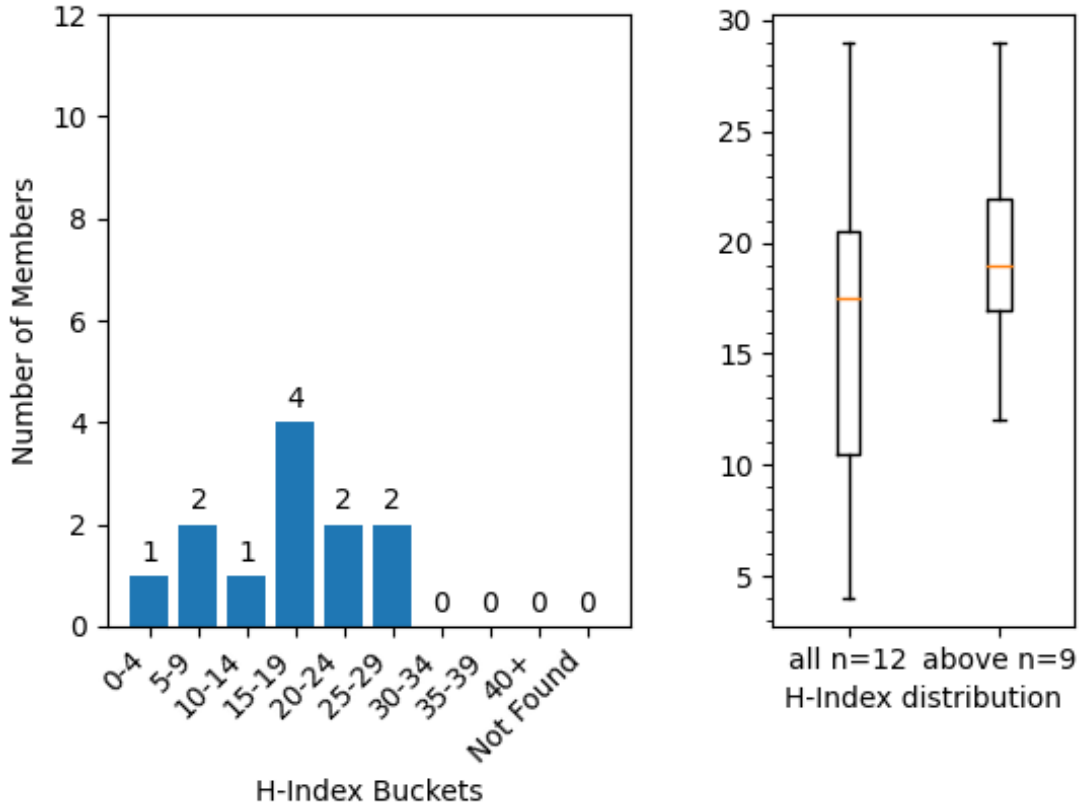
Policies

Chair Selection: The PC chair is selected by the CCF Board of Trustees. The criteria are: a strong and active researcher in complexity theory, well known and highly respected in the research community. In addition, the chair of the Program Committee should have broad knowledge of the area as well as good interpersonal skills.
Policy name: SafeToC
Policy url: https://safetoc.org

Program Committee

Link to pc: https://computationalcomplexity.org/Archive/2023/cfp.php
File: http://portal.core.edu.au/core/media/2023/pc_members/pc_zm6soxf.txt
H-index plot: http://portal.core.edu.au/core/media/2023/pc_graphs/higherrank_hindex_buckets_2260.png

Information contained within these graphs is derived using the Elsevier Scopus Database 2023.
Scopus h-index is generally about 30% lower than Google Scholar h-index.



Publishing of established researchers in the PC

http://portal.core.edu.au/core/media/2023/conf_submissions_clean_spc/higherrank2260_spc_report.csv
WPP Report: http://portal.core.edu.au/core/media/2023/wpp_reports/Un5xDM63.txt

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6. Computational Complexity Conference (CCC)
Core Rank: A
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This venue was published at 13 times by 6 of 9 individuals in the last 5+ years.

The individuals that publish at this venue are: Mika Goos(5), Amnon Ta-Shma(4), Andrej Bogdanov(1), Eli
Ben-Sasson(1), Francois Le Gall(1), Raghu Meka(1)

In 2018, there were 3 publications by 3 individuals: Amnon Ta-Shma, Eli Ben-Sasson, Mika Goos
In 2019, there were 1 publications by 1 individuals: Francois Le Gall
In 2020, there were 2 publications by 2 individuals: Amnon Ta-Shma, Mika Goos
In 2021, there were 3 publications by 2 individuals: Amnon Ta-Shma, Mika Goos
In 2022, there were 4 publications by 4 individuals: Amnon Ta-Shma, Andrej Bogdanov, Mika Goos, Raghu Meka

6 out of the 9 individuals published at this venue in 1 or more years
2 out of the 9 individuals published at this venue in 4 or more years
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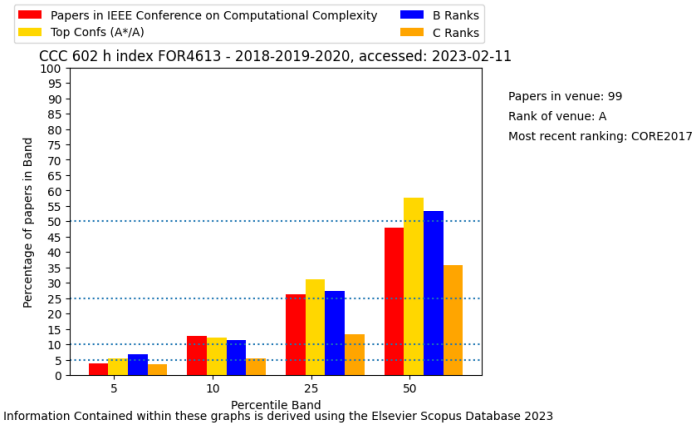
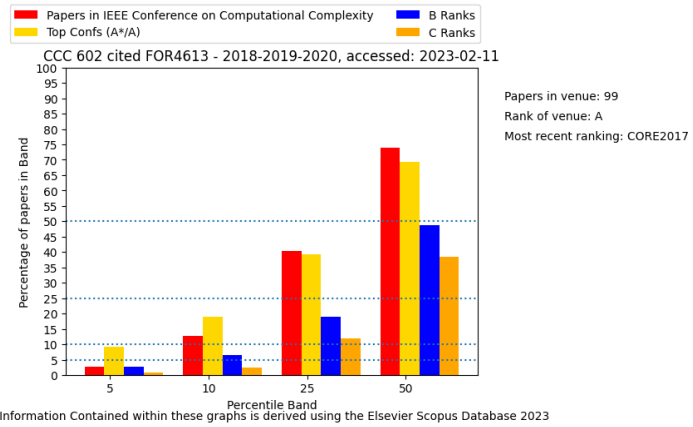
Centile graphs of paper metrics





Top People Involvement

name: Shafi Goldwasser
h-index: 73
Google Scholar URL: https://en.wikipedia.org/wiki/Shafi_Goldwasser
Justification: Turing award laureate (2012).
Grace Murray Hopper Award (1996) Gödel Prize (1993, 2001) Member of the National Academy of Sciences (2004) IEEE Emanuel R. Piore Award (2011) BBVA Award (2018) RSA Mathematics Award (1998) Loreal Unesco Women in Science Award (2021) Suffrage Science award (2016) ACM Fellow (2017) AAAS Fellow (2000)
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	0	1	0	0

Attendance: Often (50-80% of the time)

name: Avi Wigderson
h-index: 77
Google Scholar URL: https://en.wikipedia.org/wiki/Avi_Wigderson
Justification: Abel award laureate.
Nevanlinna Prize (1994) Gödel Prize (2009) Knuth Prize (2019)
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	3	2	0	0

Attendance: Almost always (>80% of the time)

name: Oded Goldreich
h-index: 96
Google Scholar URL: https://scholar.google.com/citations?user=DLQW_LoAAAAJ&hl=en
Justification: Knuth Prize (2017) Israel Prize (2021)
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	2	0	0	1

Attendance: Often (50-80% of the time)

name: Laszlo Babai
h-index: 63
Google Scholar URL: https://scholar.google.com/citations?user=KbVFiKYAAAAJ&hl=en
Justification: Gödel Prize (1993) Knuth Prize (2015) Dijkstra Prize (2016)
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	0	0	0	1

Attendance: Often (50-80% of the time)

name: Scott Aaronson
h-index: 56
Google Scholar URL: https://scholar.google.com/citations?user=EYv2BNQAAAAJ&hl=en
Justification: ACM Prize in Computing
Alan T. Waterman Award PECASE Tomassoni–Chisesi Prize
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	0	2	0	0

Attendance: Almost always (>80% of the time)

name: Salil Vadhan
h-index: 71
Google Scholar URL: https://scholar.google.co.uk/citations?hl=en&user=dqVjyRQAAAAJ
Justification: Godel Prize ACM fellow
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	1	0	1	0

Attendance: Often (50-80% of the time)

name: Subhash Khot
h-index: 39
Google Scholar URL: https://www.semanticscholar.org/author/Subhash-Khot/144336679
Justification: Waterman Award (2010) Rolf Nevanlinna Prize (2014) MacArthur Fellow (2016) Fellow of the Royal Society (2017)
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	0	1	2	0

Attendance: Often (50-80% of the time)

name: Venkatesan Guruswami
h-index: 58
Google Scholar URL: https://scholar.google.co.uk/citations?hl=en&user=Es6jE1kAAAAJ
Justification: Presburger Award (2012)
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	2	1	0	0

Attendance: Almost always (>80% of the time)

name: Rahul Santhanam
h-index: 22
Google Scholar URL: https://scholar.google.co.uk/citations?hl=en&user=rlMZibgAAAAJ
Justification: Nerode Prize
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
2	3	2	3	1

Attendance: Almost always (>80% of the time)

name: Ronald de wolf
h-index: 39
Google Scholar URL: https://scholar.google.co.uk/citations?hl=en&user=OtUCIPwAAAAJ
Justification: ERCIM Cor Baayen Award
Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	0	1	0	0

Attendance: Often (50-80% of the time)

Area Leaders publishing

Method of selection: Via top names in google scholar
Keyword: Computational complexity, Complexity theory

name	h-index	gscholar url
Amit Sahai	87	https://scholar.google.com/citations?hl=en&user=gqB23VMAAAAJ
Jeffrey C. Lagarias	63	https://scholar.google.com/citations?hl=en&user=YvJJHYQAAAAJ
Stephen Cook	51	https://scholar.google.com/citations?hl=en&user=VGxPtzIAAAAJ
Hans L. Bodlaender	68	https://scholar.google.com/citations?hl=en&user=CcqZZqMAAAAJ
Richard Cleve	44	https://scholar.google.com/citations?hl=en&user=dNq5mN4AAAAJ
Rafail Ostrovsky	83	https://scholar.google.com/citations?hl=en&user=UvFrXO4AAAAJ
Vijay Vazirani	56	https://scholar.google.com/citations?hl=en&user=8eB7Q1kAAAAJ
Georg Gottlob	83	https://scholar.google.com/citations?hl=en&user=i72_SkUAAAAJ
Vinod Vaikuntanathan	66	https://scholar.google.com/citations?hl=en&user=a8jIPIkAAAAJ
Dexter Kozen	58	https://scholar.google.com/citations?hl=en&user=LV1qWjgAAAAJ
Russell Impagliazzo	61	https://scholar.google.com/citations?hl=en&user=VwQRddkAAAAJ
JHT Bates	75	https://scholar.google.com/citations?hl=en&user=DHivHM8AAAAJ
Laszlo Babai	63	https://scholar.google.com/citations?hl=en&user=KbVFiKYAAAAJ
Joan Feigenbaum	56	https://scholar.google.com/citations?hl=en&user=IAeKTGsAAAAJ
Johan Håstad	49	https://scholar.google.com/citations?hl=en&user=nOQrdEMAAAAJ
Boaz Barak	53	https://scholar.google.com/citations?hl=en&user=I0fbJ6cAAAAJ
Daniele Micciancio	49	https://scholar.google.com/citations?hl=en&user=8rjreLIAAAAJ
Omer Reingold	53	https://scholar.google.com/citations?hl=en&user=TD9RhcgAAAAJ
Tao Jiang	65	https://scholar.google.com/citations?hl=en&user=XUhsCZwAAAAJ
Michael Ben-Or	36	https://scholar.google.com/citations?hl=en&user=22dxhNQAAAAJ

WPP Report: http://portal.core.edu.au/core/media/2023/wpp_reports/MAcB3Lkr.txt

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10. Computational Complexity Conference (CCC)
Core Rank: A
------------------------------------------------------------

This venue was published at 6 times by 3 of 15 individuals in the last 5+ years.

The individuals that publish at this venue are: Russell Impagliazzo(4), Laszlo Babai(1), Omer Reingold(1)

In 2018, there were 3 publications by 2 individuals: Omer Reingold, Russell Impagliazzo
In 2021, there were 3 publications by 2 individuals: Laszlo Babai, Russell Impagliazzo

3 out of the 15 individuals published at this venue in 1 or more years
1 out of the 15 individuals published at this venue in 2 or more years
```

Additional Data

Google Scholar Data

Sub-category url: https://scholar.google.com.au/citations?view_op=top_venues&hl=en&vq=eng_theoreticalcomputerscience
Position in sub-category: 20+
h5 index of 20th item in category: 22
No Google Scholar h5 index available for this conference
Potential reason for no h5 index: The conference recently had a change of its full name (while retaining the acronym CCC), and we believe this is not up to date in Google Scholar

Relationship to similar conferences

Partial ordering of similar conferences in the area, with argument as to where the current venue fits and why:
FOCS (ranked A*) and STOC (ranked A*) are the top conferences in Theoretical Computer Science * SODA (ranked A*) and CCC are the top conferences in Algorithms and Complexity, respectively * Weaker, yet highly ranked conferences in the field include: COLT (ranked A*), PODC (ranked A*), ITCS (ranked A), and ICALP (ranked A)

Other Information

Other Relvant Info

Other relevant information: Despite being internationally recognised as the top-ranked conference in Computational Complexity Theory (one of the most central fields in Theoretical Computer Science), the highly mathematical and rigorous nature of Complexity Theory places it in a disadvantageous position with respect to typical CS metrics.
The community is relatively small, publication cycles are long due to the mathematical difficulty of the field, and the organisational culture demands very high levels of self-selection. This leads to a relatively small number of publications, citations, and rejection thresholds than in other fields of CS.

However, the metrics above fail to capture the unanimously recognised massive impact of Complexity Theory on Theoretical Computer Science, predominantly captured by the CCC conference. Indeed, CCC is regularly attended by the top international leaders in TCS, including Turing, Abel, and Knuth awards laureates, who frequently publish in CCC.
In turn, similarly to the A* ranking of SODA, the leading conference in Algorithms, we strongly believe that CCC, the leading conference in Complexity Theory, deserves an A* ranking.

Attachments

N/A

Proposers

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Last name: Gur
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Email: tom.gur@warwick.ac.uk

Submitted By

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Email: gur.tom@gmail.com