

Submission data for 2023 CORE conference ranking process International Symposium on Theoretical Aspects of Computer Science

Thomas Schwentick, Ioan Todinca

Introductory Questions

Conference

Title: International Symposium on Theoretical Aspects of Computer Science

Acronym: STACS

Rank: A

Requested Rank

Rank: A

Conference Details

Month: March

Publisher: LIPICS - Leibniz International Proceedings in Informatics

Bi-annual: False Multiconference: False

Component in a multi-conference or umbrella event: False

Colocated with other events: False

Alternative content: True

Alternative content description: Proceedings also include invited talks - abstracts or full papers. These papers are not peer reviewed.

Proceedings Publishing Style

Proceedings Publishing: series Link to most recent proceedings:

https://drops.dagstuhl.de/opus/volltexte/2023/17651/pdf/lipics-vol254-stacs2023-complete.pdf

Further details: STACS papers have been published in different volumes of the Leibniz International Proceedings in Informatics (LIPICS).

Most Recent Years

Most Recent Year

Year: 2023

URL: https://www.conferences.uni-hamburg.de/event/272/page/153-home

Location: Hamburg, Germany Papers submitted: 183 Papers published: 52 Acceptance rate: 28

 $Source\ for\ numbers: \ \texttt{https://drops.dagstuhl.de/opus/volltexte/2023/17651/pdf/lipics-vol254-stacs2023-complete.pdf}$

General Chairs

Name: Petra Berenbrink

Affiliation: University of Hamburg, Germany

Gender: F H Index: 19 GScholar url:

DBLP url: https://dblp.org/pid/b/PetraBerenbrink.html

Program Chairs

Name: Mamadou Moustapha Kanté

Affiliation: Clermont Auvergne University, France

Gender: M H Index: 12 GScholar url:

DBLP url: https://dblp.org/pid/95/5094.html

Name: Patricia Bouyer Affiliation: CNRS, France

Gender: F H Index: 10

 $GScholar\ url:\ https://scholar.google.com/citations?user=sgKO-H4AAAAJ\&hl=fr\&oi=ao$

DBLP url: https://dblp.org/pid/b/PatriciaBouyer.html

Name: Anuj Dawar

Affiliation: University of Cambridge, UK

Gender: M H Index: 20

GScholar url: https://scholar.google.com/citations?hl=fr&user=xdOimF8AAAAJ

DBLP url: https://dblp.org/pid/d/AnujDawar.html

Name: Petra Berenbrink

Affiliation: University of Hamburg, Germany

Gender: F H Index: 19 GScholar url:

DBLP url: https://dblp.org/pid/b/PetraBerenbrink.html

Second Most Recent Year

Year: 2022

URL: https://stacs2022.sciencesconf.org

Location: Marseille, France (online)

Papers submitted: 203 Papers published: 57 Acceptance rate: 28

Source for numbers: https://drops.dagstuhl.de/opus/volltexte/2022/15809/pdf/lipics-vol219-stacs2022-complete.pdf

General Chairs

Name: Benjamin Monmege

Affiliation: Aix-Marseille University, France

Gender: M H Index: 12

GScholar url: https://scholar.google.com/citations?hl=fr&user=Zk-VtbQAAAAJ

DBLP url: https://dblp.org/pid/85/733.html

Program Chairs

Name: Petra Berenbrink

Affiliation: University of Hamburg, Germany

Gender: F H Index: 10 GScholar url:

DBLP url: https://dblp.org/pid/b/PetraBerenbrink.html

Name: Benjamin Monmege

Affiliation: Aix-Marseille University, France

Gender: M H Index: 12

GScholar url: https://scholar.google.com/citations?hl=fr&user=Zk-VtbQAAAAJ

DBLP url: https://dblp.org/pid/85/733.html

Third Most Recent Year

Year: 2021

URL: https://stacs2022.sciencesconf.org/Location: Saarbrücken, Germany (online)

Papers submitted: 228 Papers published: 56 Acceptance rate: 25

Source for numbers: https://drops.dagstuhl.de/opus/volltexte/2021/13644/pdf/lipics-vol187-stacs2021-complete.pdf

General Chairs

Name: Markus Bläser

Affiliation: Saarland University, Germany

Gender: M H Index: 13

GScholar url: https://scholar.google.com/citations?hl=fr&user=ABOCIBAAAAAJ

DBLP url: https://dblp.org/pid/95/6062.html

Program Chairs

Name: Benjamin Monmege

Affiliation: Aix-Marseille University, France

Gender: M H Index: 10

GScholar url: https://scholar.google.com/citations?hl=fr&user=Zk-VtbQAAAAJ

DBLP url: https://dblp.org/pid/85/733.html

Name: Markus Bläser

Affiliation: Saarland University, Germany

Gender: M H Index: 13

GScholar url: https://scholar.google.com/citations?hl=fr&user=ABOCIBAAAAAJ

DBLP url: https://dblp.org/pid/95/6062.html

Policies

Chair Selection: The PC chairs are selected by the Steering Committee.

Until 2022, the conference had one track and its PC had two co-chairs. it was common that a PC co-chair would organise the conference in some year N and act as PC co-chair in two years: N-1 and N. Since the conference takes place in Germany or France, in each year one co-chair was based in France and one in Germany.

Since 2023, the conference has two tracks and the two PCs together have 4 PC co-chairs. To two of them the above rule still applies. The other two are appointed for one year only. They can be based anywhere and, in fact, we aim at international co-chairs: in 2024 it will be Daniel Lokshtanov, USA, for track A and Orna Kupferman, Israel, for track B.

Policy name: We follow the principles of the ACM policy against harassment.

Policy url: https://www.acm.org/about-acm/policy-against-harassment

Policy name: We work with safeTOC initiative in order to join their policy against harassment from 2024 on. In particular, we will make sure that ToC advocates will be present at the conference.

Policy url: https://safetoc.org/

Policy name: STACS signed the TCS4F manifesto in 2019, thus committing to the goal to reduce its carbon footprint by 50% until 2030. In particular, STACS allows remote presentation of papers and invited talks.

Policy url: https://tcs4f.org/

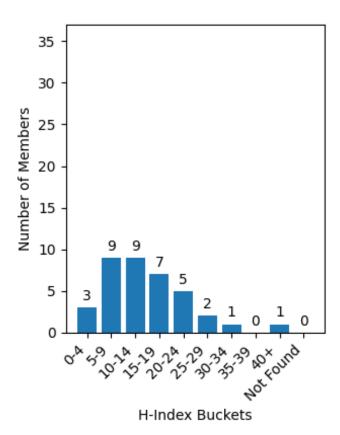
Program Committee

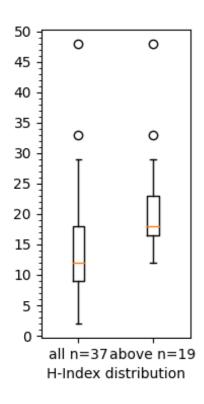
Link to pc: https://www.conferences.uni-hamburg.de/event/272/page/155-committees
File: http://portal.core.edu.au/core/media/2023/pc_members/STACS2023_PC_zCWIYBK.txt

H-index plot: http://portal.core.edu.au/core/media/2023/pc_graphs/higherrank_hindex_buckets_1988.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/higherrank1988_spc_report.csv WPP Report: http://portal.core.edu.au/core/media/2023/wpp_reports/4uBwEzVb.txt

5. Symposium on Theoretical Aspects of Computer Science (STACS) Core Rank: A

This venue was published at 8 times by 6 of 17 individuals in the last 5+ years.

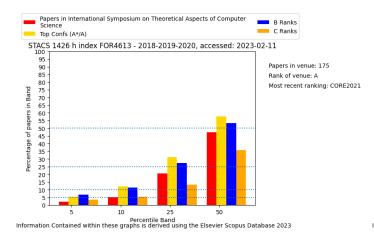
The individuals that publish at this venue are: Daniel Paulusma(2), Patricia Bouyer(2), Amin Coja-Oghlan(1), George Giakkoupis(1), Mamadou Moustapha Kante(1), Omar Fawzi(1)

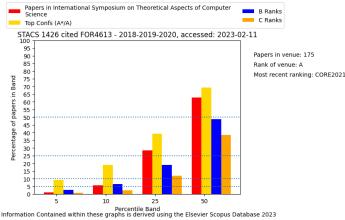
```
In 2018, there were 4 publications by 3 individuals: Daniel Paulusma, George Giakkoupis, Patricia Bouyer In 2021, there were 2 publications by 2 individuals: Amin Coja-Oghlan, Omar Fawzi
```

In 2022, there were 2 publications by 2 individuals: Mamadou Moustapha Kante, Patricia Bouyer

6 out of the 17 individuals published at this venue in 1 or more years 1 out of the 17 individuals published at this venue in 2 or more years

Centile graphs of paper metrics





Top People Involvement

name: Michal Pilipczuk

h-index: 24

Google Scholar URL: https://scholar.google.com/citations?user=RPD8Up0AAAAJ&hl=fr&oi=ao

 $\textbf{Justification: ERC starting grant "Decomposition methods for discrete problems"}, \\ \textbf{https://cordis.europa.eu/project/id/948057.} \\ \textbf{2.1} \\ \textbf{2.2} \\ \textbf{3.2} \\ \textbf{3.3} \\ \textbf{3.4} \\ \textbf$

Co-author of the book "Parameterized algorithms", Springer.

Paper counts:

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

Attendance: Sometimes (20-50% of the time)

name: Rolf Niedermeier

h-index: 41

Google Scholar URL: https://scholar.google.com/citations?user=K2BY6JcAAAAJ

Justification: Author of the book "Invitation to fixed-parameter algorithms" (Oxford University Press). Member of the "review board for theoretical computer science" of the DFG, the German science foundation. More than 12800 citations on Google Scholar. He passed away in 2022.

Paper counts:

| Most Recent: | Second most recent: | Third most recent: | Fourth most recent: | Fifth most recent: |
|--------------|---------------------|--------------------|---------------------|--------------------|
| I | | l | I | U |

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

name: Fedor Fomin

h-index: 43

Google Scholar URL: https://scholar.google.com/citations?hl=fr&user=96ZXvOsAAAAJ

Justification: Editorial boards of Algorithmica and SIDMA, member of Academia Europea, more than 14800 citations on Google Scholar. ERC advanced grant "Rigorous theory of preprocessing", https://cordis.europa.eu/project/id/267959. Co-author of the book "Parameterized algorithms", Springer.

Paper counts:

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

Attendance: Occasionally (< 20% of the time)

name: Saket Saurabh

h-index: 38

 $\label{lem:conditions} Google \ Scholar \ URL: \ \verb|https://scholar.google.com/citations?user=76_9TIOAAAAJ\&hl=frace to the state of th$

Justification: More than 11600 citations on Google Scholar, among the top 10 contributors to STOC, FOCS, SODA, LICS during the last 5 years. ERC Starting grant "Parameterized approximation", https://cordis.europa.eu/project/id/306992. Co-author of the book "Parameterized algorithms", Springer.

Paper counts:

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

Attendance: Occasionally (< 20% of the time)

name: Stefan Kratsch

h-index: 24

Google Scholar URL: https://scholar.google.com/citations?hl=fr&user=P3-nVvkAAAAJ

Justification: More that 10 publications in J. ACM, FOCS, STOC, SODA.

Paper counts:

| raper counts. | | | | |
|---------------|---------------------|--------------------|---------------------|--------------------|
| Most Recent: | Second most recent: | Third most recent: | Fourth most recent: | Fifth most recent: |
| 1 | 0 | 0 | 3 | 1 |

Attendance: Occasionally (< 20% of the time)

name: Daniel Lokshtanov

h-index: 38

Google Scholar URL: https://scholar.google.com/citations?hl=fr&user=vaQGFLsAAAAJ

Justification: More than 10600 citations on Google Scholar, among the top 10 contributors to STOC, FOCS, SODA, LICS during the last 5 years. ERC Starting grant "Parameterized approximation", https://cordis.europa.eu/project/id/715744. Co-author of the book "Parameterized algorithms", Springer. Will co-chair the PC Track A of STACS 2024.

Paper counts:

| • | | | | |
|--------------|---------------------|--------------------|---------------------|--------------------|
| Most Recent: | Second most recent: | Third most recent: | Fourth most recent: | Fifth most recent: |
| 0 | 0 | 2 | 0 | 0 |

Attendance: Occasionally (< 20% of the time)

name: François Le Gall

h-index: 23

Google Scholar URL: https://scholar.google.com/citations?hl=fr&user=tpCh6MIAAAAJ

Justification: Member of the editorial board of SICOMP, TQC (ACM Transactions on Quantum Computing), etc.

Paper counts:

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

Attendance: Occasionally (< 20% of the time)

name: Eun-Jung Kim

h-index: 26

 $\label{lem:complex} \textbf{Google Scholar URL: } \verb|https://scholar.google.com/citations?hl=fr&user=HabLBPMAAAAJ| | \textit{Habble Management of the property of the pro$

Justification: CNRS bronze medal 2017 (awards prominent young CNRS researchers).

Paper counts:

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

Attendance: Occasionally (< 20% of the time)

name: Yusuke Kobayashi

h-index: 24

Google Scholar URL: https://scholar.google.com/citations?hl=fr&user=BT9muVcAAAAJ

Justification: More than 10 STOCS/FOCS/SODA papers.

Paper counts:

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

Attendance: Sometimes (20-50% of the time)

name: Tobias Friedrich

h-index: 31

Google Scholar URL: https://scholar.google.com/citations?hl=fr&user=vxfzU6IAAAAJ

Justification: More than 9900 citations on Google Scholar.

Paper counts:

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

Attendance: Occasionally (< 20% of the time)

Area Leaders publishing

Method of selection: The area leaders are selected from the top contributors to FOCS, STOC, SODA, LICS and ICALP since 2014, obtained by the DBLP request: "venue:FOCS|STOC|SODA|LICS|ICALP year:2023|2022|2021|2020|2019|2018|2017|2016|2015|2014". We chose the first 20 names who have a Google Scholar h-index of at least 45, and a Google Scholar page. (The only exception is Toniann Pitassi whose h-index is clearly above 45; this is a disinterested choice since she has no STACS papers.)

Thirteen of these area leaders have STACS papers, representing altogether 77 STACS articles.

| | name | h-index | gscholar url |
|---------|--------------------------|---------|--|
| | David P Woodruff | 76 | https://scholar.google.com/citations?user=ftjxY8wAAAAJ&hl=de&oi=ao |
| | Anupam Gupta | 58 | https://scholar.google.com/citations?user=g87CIwgAAAAJ&hl=de&oi=ao |
| | Daniel Lokshtanov | 50 | https://scholar.google.com/citations?user=vaQGFLsAAAAJ&hl=de&oi=ao |
| | Saket Saurabh | 51 | https://scholar.google.com/citations?user=76_9TIOAAAAJ&hl=de&oi=ao |
| | Monika Henzinger | 71 | https://scholar.google.com/citations?user=NXbggxYAAAAJ&hl=de&oi=ao |
| | MohammadTaghi Hajiaghayi | 71 | https://scholar.google.com/citations?user=SQ1eGN4AAAAJ&hl=de&oi=ao |
| | Robert Krauthgamer | 46 | https://scholar.google.com/citations?user=M3yUDOcAAAAJ&hl=de&oi=ao |
| | Venkatesan Guruswami | 58 | https://scholar.google.com/citations?user=Es6jE1kAAAAJ&hl=de&oi=ao |
| | Nikhil Bansal | 52 | https://scholar.google.com/citations?user=3Lmd6AMAAAAJ&hl=de&oi=ao |
| eyword: | Rocco Anthony Servedio | 50 | https://scholar.google.com/citations?user=x7cbdTcAAAAJ&hl=de&oi=ao |
| | Fedor V. Fomin | 60 | https://scholar.google.com/citations?user=96ZXvOsAAAAJ&hl=de&oi=ao |
| | Mikkel Thorup | 67 | https://scholar.google.com/citations?user=UPBuOPIAAAAJ&hl=de&oi=ao |
| | Sanjeev Khanna | 68 | https://scholar.google.com/citations?user=HriWXcEAAAAJ&hl=de&oi=ao |
| | Daniel Marx | 50 | https://scholar.google.com/citations?user=hY2ibr8AAAAJ&hl=de&oi=ao |
| | Tonian Pitassi | ?? | https://www.cs.toronto.edu/~toni/ |
| | Chandra Chekuri | 56 | https://scholar.google.com/citations?user=7j3itaMAAAAJ&hl=de&oi=ao |
| | Martin Grohe | 55 | https://scholar.google.com/citations?user=Sou5ihOAAAAJ&hl=de&oi=ao |
| | Ryan O'Donnell | 46 | https://scholar.google.com/citations?user=Z8U0BwcAAAAJ&hl=de&oi=ao |
| | Constantinos Daskalakis | 54 | https://scholar.google.com/citations?user=iTv2cOgAAAAJ&hl=de&oi=ao |
| | Vahab Mirrokni | 59 | https://scholar.google.com/citations?user=opbZfwOAAAAJ&hl=de&oi=ao |

WPP Report: http://portal.core.edu.au/core/media/2023/wpp_reports/znNEt57D.txt

```
13. Symposium on Theoretical Aspects of Computer Science (STACS)

Core Rank: A
```

This venue was published at 10 times by 5 of 13 individuals in the last 5+ years.

The individuals that publish at this venue are: Daniel Lokshtanov(3), Fedor V. Fomin(3), Monika Henzinger(2), Martin Grohe(1), Robert Krauthgamer(1)

```
In 2018, there were 1 publications by 1 individuals: Daniel Lokshtanov
In 2019, there were 2 publications by 2 individuals: Fedor V. Fomin, Robert Krauthgamer
In 2020, there were 2 publications by 2 individuals: Martin Grohe, Monika Henzinger
In 2021, there were 3 publications by 2 individuals: Daniel Lokshtanov, Fedor V. Fomin
In 2022, there were 1 publications by 1 individuals: Fedor V. Fomin
In 2023, there were 1 publications by 1 individuals: Monika Henzinger

5 out of the 13 individuals published at this venue in 1 or more years
3 out of the 13 individuals published at this venue in 2 or more years
1 out of the 13 individuals published at this venue in 3 or more years
```

Additional Data

Ke

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 h5 index for this conference: 20

Relationship to similar conferences

Partial ordering of similar conferences in the area, with argument as to where the current venue fits and why:

List of conferences (CORE rank / h5 / median h5 / acceptance rate in the last five years):

FOCS (A* / 52 / 78 / <31) STOC(A* / 61 / 84 / <27) ICALP (A / 32 / 45 / <30) -> STACS (A / 20 / 27 / <30) FOSSACS (A / 20 / 28 / >31) MFCS (A / 18 / 22 / >39) ISAAC (A / 13 / 19 / >35) LATIN (B / 13 / 17 / >35)

FOCS, STOC, ITCS, ICALP, MFCS, LATIN cover more or less the same area as STACS: theoretical computer science. ISAAC is more focused on algorithms and theory of computing, similar to STACS Track A, while FoSSaCS is also more specialised but with a focus closer to STACS Track B.

FOCS, and STOC take place mainly in the USA, ICALP, MFCS and FoSSaCS in Europe, LATIN in Latin America, ISAAC in Asia. FOCS and STOC are clearly considered above STACS. To a lesser extent this also holds for ICALP, the most renowned European conference in Theoretical Computer Science. On the other hand, STACS is more selective and we believe that it is higher regarded than MFCS, FoSSaCS, ISAAC and LATIN.

Other Information

Other Relvant Info

Other relevant information: Let us mention the journal placements of STACS papers from 2016-2020.

Over this period, the rough distribution of STACS papers that had a follow-up journal article at all, by quality of journal venue was as follows:

- In A* journals (SICOMP, JCSS, Algorithmica, IEEE Trans. Inf. Theory): >18%
- In A journals (LMCS, SIAM Journal on Discrete Mathematics, ACM ToCL, Computational Complexity, ACM TAIg, TCS, Computational Complexity, J. Autom. Reason): 28%
- As invited papers in Theory of Computing Systems: 28%
- In unranked, but very good journals (ACM ToCT, ACM Transactions on Economics and Computation, J. Comb. Theory (A&B), Journal on Symbolic Logic, Discrete Applied Math., Information & Computation, Discret. Comput. Geom., Discrete Optimisation): 20%
- In other journals: <6%

Attachments

N/A

Proposers

First name: Thomas Last name: Schwentick

Affiliation: Dortmund University, Germany Email: thomas.schwentick@tu-dortmund.de

First name: Ioan Last name: Todinca

Affiliation: University of Orléans, France Email: ioan.todinca@univ-orleans.fr

Submitted By

Name: Todinca Ioan

Email: ioan.todinca@univ-orleans.fr