## Association for Constraint Programming

## Annual General Meeting 2022 CP2022



J. Christopher Beck, President of the ACP

jcb@mie.utoronto.ca

# The Plan

Upcoming Events	15 min
ACP Executive & Elections	5 min
ACP Awards	5 min
ACP Finances	5 min
Constraints Journal Update	5 min
Things the EC is Working On	5 min
Open Discussion	10-20 min



# Thanks to CP2022 Organizers!

- Conference Chairs

   Roie Zivan &
   Ferdinando Fioretto
- Program Chair
   Christine Solnon



• Local organization committee, chairs, and program committee

# **Upcoming Events**

- Summer School 2023
- CPAIOR2023
- CP2023
- CP2024 [breaking news!]



# ACP Summer School Early July 2023

In Leuven, Belgium By Tias Guns and team

Tentative topics:

- Explanations in constraint solving
- Constraint and preference learning
- Decision-focussed learning





# CPAIOR2023

- Not yet finalized ...
  - CPAIOR folks are working on it

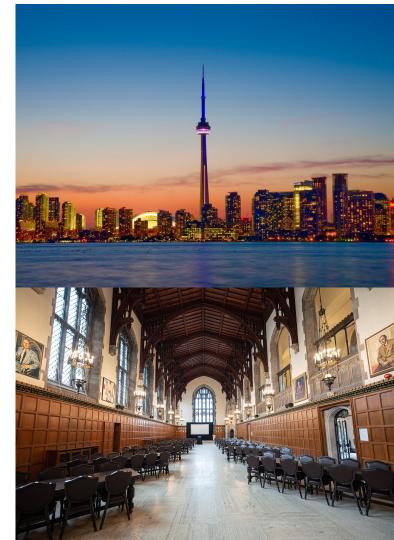


# CP2023 in Toronto!

- Conference Chair: Andre Cire
- Program Chair: Roland Yap
- Location: University of Toronto

 Dates: Submission: Mid March Notification: Late May Conf: August 27-31, 2023

harthouse.ca/spaces/venues



## CP 2024 ...

#### Joan Espasa Arxer







#### **CONFERENCE CHAIRS**

Miquel Bofill, University of Girona Mateu Villaret, University of Girona

#### LOCATION

Girona is in the northeast of Catalonia, about 100 kilometers of Barcelona, near the Costa Brava and the Pyrenees.

The Old Quarter of the city is one of the most important medieval monumental ensembles of Catalonia.



#### **CONFERENCE VENUE**

The University of Girona (UdG) has a nice campus in the old town, at walking distance from hotels and restaurants.

The conference will take place at the Sant Domènec Church, which is part of the historic building of the UdG, and adjoining classrooms.

We will have Coffee Breaks and Finger Lunches at the cloister next to the rooms



Hope to see you in Girona!

## CP 2025 ...

### [YOUR LOCATION HERE]

talk to Emmanuel Hebrard



## **Important Dates**

Summer School 2023 Leuven, Belgium

early July, 2023

CPAIOR2023 Location?

Paper Submission ???

Notification ???

Conference ???

CP2023 Toronto, Canada

Paper Submission Mid March

> Notification Late May

Conference Aug 27-31, 2023

CP2024 Girona, Spain

Sept 2-6, 2024



# Who is the ACP Executive?



Chris Beck President



David Bergman Secretary



Sophie Demassey Treasurer



Tias Guns Webmaster



Emmanuel Hebrard Conference Liaison



Zeynep Kiziltan Diversity, Equity, & Inclusion Delegate



Michele Lombardi



Maria Garcia de la Banda Past President

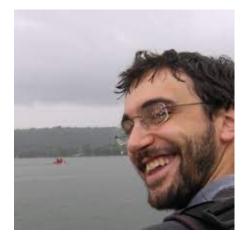
UNIVERSITY OF TORONTO

#### Engineering

# Terms Ending Dec 2022







Sophie Demassey

**Emmanuel Hebrard** 

Michele Lombardi



Engineering

Thank you for all your contributions!

Elections statements: https://www.a4cp.org/node/1324

# ACP EC Elections – on now!



Ferdinando Fioretto

Nadjib Lazaar



Gilles Pesant



Hélène Verhaege



UNIVERSITY OF

Ines Lynce

Engineering

All ACP members should have received voting instructions by email on July 19 (from helios voting)

Voting is open until Aug 26.

## **ACP** Awards



# ACP Doctoral Research Award

- Committee
  - Simon de Givry (c), Jimmy Lee, John Hooker
- Honorable Mention



#### **Dimosthenis Tsouros**

Efficient Methods for Constraint Acquisition University of Western Macedonia Supervisors: Kostas Stergiou



Engineering

# ACP Doctoral Research Award

- Committee
  - Simon de Givry (c), Jimmy Lee, John Hooker
- Winner

#### Hélène Verhaege

Engineering



The Extensional Constraint Catholic University of Louvain Supervisors: Pierre Schaus, Christophe Lecoutre

The work improved state-of-the-art propagation techniques for extensional constraints, a challenging topic studied during more than thirty years by the CP community.

## ACP Early Career Researcher Award

### Committee

– John Hooker (c), Claude-Guy Quimper, Guido Tack

### • Winner



Kuldeep Meel has made fundamental contributions to the problem of counting and sampling solutions of constraints by combining deep theoretical insights with the development of scalable systems. His work has had impact in satisfiability, machine learning, formal verification, and knowledge representation, and it has already seen practical application in such areas as neural network verification, power transmission network reliability, and forest fire prediction.

Kuldeep Meel National University of Singapore

## ACP Distinguished Service Award

### Committee

 Thomas Schiex (c), Christine Solnon, Chris Beck, David Bergman, Rina Dechter

### • Winner



Helmut Simonis Insight Centre for Data Analytics

For his tireless work to expand the reach of constraint programming and to constantly inject his positive energy and unbiased curiosity in the CP research community. From his work as a past president of the ACP and past program chair of CP, to his continued contributions in education, outreach and industry application of CP, Helmut's contributions to constraint programming are numerous and impactful. He even doubles as a photographer at our annual meeting.

## ACP CP App Competition

- Organizer
  - Eugene Freuder
- Committee
  - Zeynep Kiziltan, Helmut Simonis, Mark Wallace
- Entrants
  - 4 submission: 2 disqualified due to not being on Google Play

## **Logic Games Solver**

#### Logic Games Solver

10+ E Downloads Everyone ①

#### About this app $\rightarrow$

\_\_\_\_

Tired of being stuck on a logic game, not able to find the last hint you need to finally finish it? This app is made for you. By employing a form of Artificial Intelligence called Constraint Programming, this app solves even the hardest logic games. No more unfinished Sudokus, Kakuros and more, you can now find the last hint you needed.

Mathieu Vavrille

Université de Nantes

$\begin{array}{c c} \text{ogic Games Solver} & \bullet & \bullet & \bullet \\ \hline \textbf{Logic Games Solver} \\ \textbf{Solver} \\ \textbf{Solver} \\ \textbf{Sudoku} & \textbf{1} & \textbf{8} & \textbf{6} \\ \textbf{Sudoku} & \textbf{1} & \textbf{8} & \textbf{8} \\ \textbf{Sudoku} & \textbf{1} & \textbf{8} & \textbf{8} \\ \textbf{Sudoku} & 8$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5       20       10       21         3       2       1       4       3       10         4       3       5       2       1       2       3         4       7       5       2       4       6       3       3       3         7       5       2       4       6       3       3       3       3       3         7       1       4       2       5       2       1       4       6       3       1       ×       0 ×       ×       1         1       4       2       5       2       1       4       3       1       ×       0 ×       ×       1         1       4       2       5       2       3       ×       3       ×       ×       4       ×       1       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       ×       × <th>3 2 5 4 2 3 1 2 2 3 2 4 2 2 4 2 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 2 4 2 2 2 4 2 2 3 2 2 2 2 2 4 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2</th>	3 2 5 4 2 3 1 2 2 3 2 4 2 2 4 2 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 2 4 2 2 2 4 2 2 3 2 2 2 2 2 4 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2
Slitherlink 2 Bridges	Auto Solve 🔹 Undo Redo Back	Set outline     +Line     +Line     +Col     -Col       Undo     Redo     Back     Undo     Redo     Back	Undo Redo

#### Developer contact ^

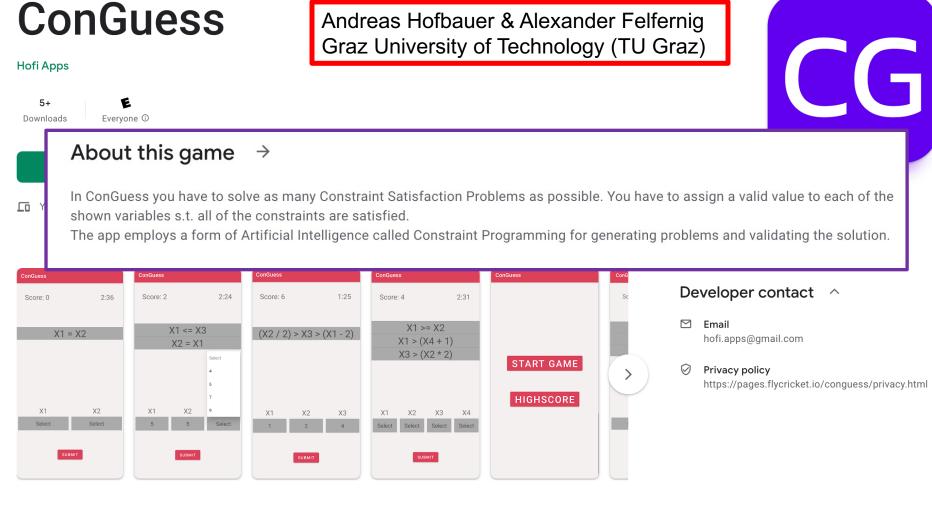
Email logic.games.solver@gmail.com

Privacy policy

Back

https://github.com/MathieuVavrille/LogicGamesSo lver/blob/master/privacy\_policy.md





## ACP CP App Competition

- Awards Committee decided not to award a winner
- Both entries are awarded Honorable Mentions

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## **ACP** Finances

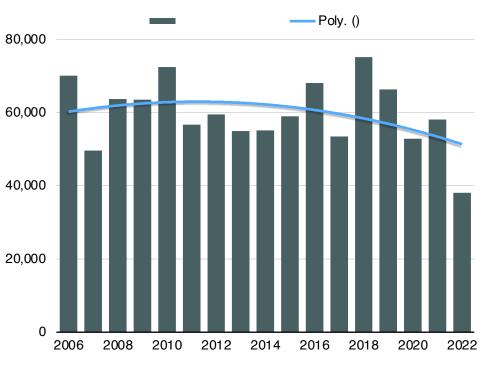


## Treasurer's report

Last year	(CP 2021 Montpellier)	€58,099
In		
	Profit CP 2021	€4,702
	Interest 2020	€271
Out		
	Autumn School 2019 Sponsorship	€122
	CP 2021 LIPICS Proceedings	€3,600
	Summer School 2022 Sponsorhip	€7,900
	Doctoral Program 2022 Sponsorship	€2,300
	CP 2023 Sponsorship	€10,700
	Web Provider	€300
	Banking Fees	€39
End Balance	(CP 2022 Haifa)	€38,111
	CP 2019 Balance	€19,800
	Awards	€5,000
Expected		€53,000

## Treasurer's report

€70,093
€49,626
€63,742
€63,530
€72,489
€56,747
€59,528
€54,949
€55,102
€58,940
€68,031
€53,511
€75,169
€66,310
€52,826
€58,099
€38,111



We take donations: http://a4cp.org/sponsorships-donations

## Finances

• With CP2021 profit: €53K

– Goal of ~ €50K in bank to keep non-profit status

- But we have certainly been spending money
  - This is the rainy day, we've been saving for
  - Hopefully situation closer to normal in 2023





### **Constraints Journal**

#### Report from EiC Mark Wallace

3<sup>rd</sup> August 2022





### Status

• Two issues so far this year

April: 6 articles, one letter
July: 5 articles, an application paper and a letter

Springer

 (2<sup>nd</sup>) new publishing editor Teena Bedi
 New "improved" editorial management system – SNAPP due shortly

#### Submissions (2022)

 $\odot\,\text{28}$  in 2022 so far

- o 3 resubmissions under review
- $\circ$  1 accept
- $\circ$  15 reject
- $\circ$  9 under review



### **Constraint Statistics (2021)**

- Impact factor (2021): 0.583
- Five year impact factor (2021): 1.591
- Submission to first decision (median): 30 days
- Downloads (2021): 21,216



### **Soliciting Papers**

 Requesting conference authors for Constraints submissions

OCPAIOR 2021, CP 2021, CPAIOR 2022

 ${\circ}2$  extensions of CPAIOR 2021 papers in April issue

 $\circ$ 1 extensions of CP 2021 papers in April issue

 ${\circ}3$  extensions of CP 2021 papers in July issue

#### • Proposal

 All papers accepted for Constraints should be eligible for presentation at CP





- Papers surveying links between CP and MIP, Metaheuristics, Machine Learning
   After initial discussions with author groups, nothing submitted
- Special Issues
  - $\odot$  Energy Explored with Los Alamos National Lab and Monash  $\odot$  Energy too much MIP
- Supporting videos
  - $\odot$  Springer concerned about:
    - making this mandatory "What if the authors have paucity of time and concerns in creating video"
    - "following up with the authors to share their video will be overwhelming for the publishing team of Springer"



# Things the EC is Working On



# What Do We Do?

- Finding CP organizers and chairs
- Find summer schools organizers
- Finding people to run in elections
- Overseeing finances
- Sponsoring events (e.g., competitions)
- Colocation efforts

Engineering

# What Do We Do?

- Setting up awards committees
- Quarterly reports
- Equity, Diversity, & Inclusion
- Website
- Coordination with Constraints journal



# Diversity, Equity, Inclusion

- DEI Chair, CP2022: Andrea Rendl
- DEI Delegate on ACP EC: Zeynep Kiziltan
- First CP DEI Friday morning
  - Panel: Noa Agmon, Luis Quesada, Helene Verhaege
  - Co-chairs: Maria Garcia de la Banda, Chris
- Beck UNIVERSITY OF TORONTO Engineering

## Finances

- Goal: ~ €50K for emergencies and float
- Challenges
  - Expensive (in-person) conferences reduce participation/accessibility
  - Conferences getting more expensive
  - ACP money has to come from somewhere
    - (i.e., conference fees)

Engineering

## Discussion



# Seed Topics

- Any of the things that the ACP EC does?
- Should we try to co-locate with other small AI confs?
- Online conferences
  - More accessible?
  - Always remote access? Sometimes only online or in-person?
- Ideas for growing the community?
- Conference vs. journal publications?
  - What is important to us?
- Other things you want to talk about