

GRAPH DRAWING CONTEST

2025 Report



CONTEST COMMITTEE

Sara Di Bartolomeo (co-chair)

TU Wien

Fabian Klute

Polytechnic University of Catalonia

Debayyoti Mondal

University of Saskatchewan

Jules Wulms (co-chair)

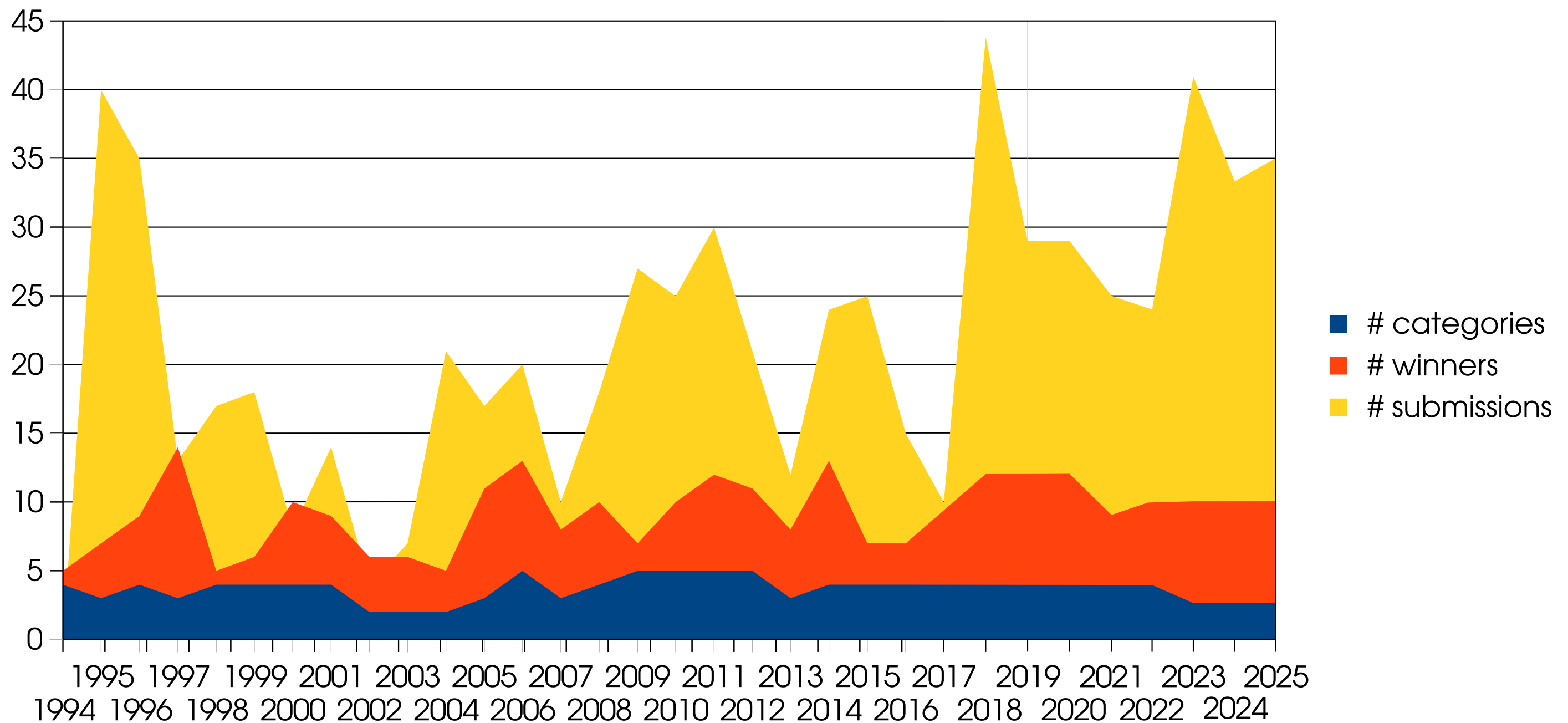
TU Eindhoven

GRAPH DRAWING CONTEST

Historic Perspective

GRAPH DRAWING CONTEST

Historic Perspective



GRAPH DRAWING CONTEST

Historic Perspective

1994 Uwe Wuerker • Stefan Hougardy • Petra Mutzel & Thomas Odenthal • Georg Sander

1995 Falk Schreiber & Carsten Friedrich • Vladimir Batagelj & Andrej Mrvar • Paulis Kikusts & Peteris Rucevskis • Georg Sander

1996 Ulrich Föbmeier & Michael Kaufmann • Vladimir Batagelj & Andrej Mrvar • Falk Schreiber & Carsten Friedrich • Thomas Kamps, Jörg Klein & Thomas Reichenberger

1997 B. Bascary, B. Cattan, A. Cohen-Solal, M. Philip & H. Szigeti • Vladimir Batagelj & Andrej Mrvar • Michael Kaufmann & Gunnar Klau • Thomas Ziegler & Petra Mutzel • Cristian Ghezzi • Falk Schreiber & Carsten Friedrich

1998 Vladimir Batagelj & Andrej Mrvar • Petrus Abri Santoso & Andi Surjanto • Roland Wiese

1999 Vladimir Batagelj & Andrej Mrvar • Ulrik Brandes • Karlis Freivalds & Paulis Kikusts • Rowena Mankelow

2000 Nikola S. Nikolov • Vladimir Batagelj & Andrej Mrvar • Jan Adamec • C. Duncan, P. Gajer, M. Goodrich & S. Kobourov • Robby Schönfeld & Nikola S. Nikolov

2001 Ulrik Brandes & Marco Gärtler • C. Gutwenger, K. Klein, J. Kupke & S. Leipert • Roland Wiese • Carsten Friedrich • Merijam Percan

2002 Daniel Gmach • Paul Holleis & Thomas Zimmermann • Nikola S. Nikolov & Patrick Healey • Christoph Vogt

2003 Daniel Gmach, Paul Holleis & Thomas Zimmermann • Christian Kuklas, Dirk Koschützki & Falk Schreiber

2004 Andrei Grecu & Gunnar Klau • Ulrik Brandes, Daniel Fleischer & Thomas Puppe

2005 Markus Chimani, Carsten Gutwenger & Karsten Klein • V. Batagelj, A. Mrvar, A. Ahmed, X. Fu, S. Hong & D. Merrick • Marco Gärtler & Markus Krug

2006 Michael McGuffin • Adel Admed, Seok-Hee Hong, Quan Nguyen & Donald Taylor • Adel Admed, Xiaoyan Fu, Seok-Hee Hong, Quan Nguyen & Kai Xu • Fabrizio Frati & Markus Geyer • Andreas Gerasch & team

2007 Wolfgang Brunner & Jens Schmidt • Robert Theron, Rodrigo Santamaria, Juan Garcia, Diego Gomez & Vadim Paz-Madrid • Felix Heinen

2008 Yifan Hu & Emden Gansner • Melanie Badent & Pietro Palladino • Melanie Badent, Martin Mader & Christian Piech • Hoi-Ming Wong, Markus Chimani & Karsten Klein

2009 Hui Liu • Nicholas Jefferson • Melanie Badent & Michael Baur • Hoi-Ming Wong & Karsten Klein • Joe Fowler

2010 Quan Nguyen • Sergey Pupyrev • M. Baur, M. Siebenhaller, R. Wiese & Thomas Wurst • Petra Mutzel & Hoi-Ming Wong • Maarten Löffler & Martin Nöllenburg

2011 Hanley Weng • M. Löffler, D. Eppstein, M. Goodrich & S. Kobourov • R. Zelina, S. Bota, S. Houtman & R. Ban • Sergey Pupyrev • Maarten Löffler & Martin Nöllenburg

2012 Roman Prutkin • Sergey Pupyrev • Remus Zelina, S. Bota, S. Houtman & R. Balaban • Tobias Brinkjost • A. Bauer, I. Rutter, J. Vordermeier & M. Kaufmann

2013 Jos de Jong & Giovanni Paziienza • Remus Zelina, Sebastian Bota, Siebren Houtman & Radu Balaban • Thomas Bläsius & Ignaz Rutter

2014 Martin Nöllenburg • Remus Zelina, Sebastian Bota, Siebren Houtman & Radu Balaban • Tamara Mchedlidze, Martin Nöllenburg, Alexander Khomenko, Igor Karlinsky & Denis Knöpfle • Philipp Kindermann, Fabian Lipp & Wadim Reimche

2015 Tamara Mchedlidze • Jennifer Hood & Pat Morin • Boris Klemz, Ulf Rüegg & Fabian Lipp • Josef Cibulka

2016 Fabian Klute • Jonathan Klawitter & Tamara Mchedlidze • Michael Bekos, Thanasis Lianas & Chrysanthi Raftopoulou • Johan de Ruiter

2017 Steven Shangzhou Wang • Fabian Klute & Irene Parada • Theresa Fröschl, Jonathan Klawitter & Darren Strash • Almut Demel, Dominik Dürschnabel, Tamara Mchedlidze, Marcel Radermacher & Lasse Wulf

2018 Evmorfia Argyriou, Michael Baur, Anne Eberle & Armin Gufler • Florian Grötschla, Tamar Mirbach, Christian Ortlieb, Tamara Mchedlidze & Marcel Radermacher • Myroslav Kryven & Johannes Zink • Amadäus Spallek, Christian Geckeler, Henry Förster & Michael Bekos

2019 Evmorfia Argyriou, Christian Brunnermeier, Anne Eberle & Johannes Rössel • Guangping Li, Soeren Nickel, Martin Nöllenburg, Ivan Viola & Hsiang-Yun Wu • Evmorfia Argyriou, Henry Förster & Martin Gronemann • Solveig Klepper, Axel Kuckuk, Paul Palomero Bernardo, Maximilian Pfister, Patrizio Angelini, Michalis Bekos & Michael Kaufmann

2020 Tamara Drucks, Moritz Leidinger & Giulio Pace • Rupert Etrich, Julian Haumer & Samantha Fuchs • Jonathan Klawitter & Johannes Zink • Solveig Klepper, Axel Kuckuk, Paul Palomero Bernardo, Maximilian Pfister, Patrizio Angelini, Michalis Bekos, Henry Förster, & Michael Kaufmann

2021 Simon Pointner, David Ammer & Thorsten Korpitsch • Jonathan Klawitter & Felix Klesen • Moritz Greiner, Axel Kuckuk, Michael Bekos & Maximilian Pfister

2022 Thomas Depian, Michael Huber & Wilhelm Wanecek • Axel Kuckuk, Henry Förster & Sarah Gester • Fouli Argyriou & Henry Förster • Laurent Moalic, Dominique Schmitt & Julien Bianchetti

2023 André Schulz • Christoph Kern, Manuel Oberbacher & Horst Zahradnik • Tim Hegemann, Florentina Voboril & Johannes Zink • Julien Bianchetti, Laurent Moalic & Dominique Schmitt

2024 Hoang An Nguyen, Nico Martin, Jannik Brandstetter & Micha Fauth • Tim Hegemann & Johannes Zink • Julien Bianchetti, Pauline Blavy, Guilhem Gerouille, Laurent Moalic & Dominique Schmitt

2025 ?

2025 CONTEST

Overview

2025 CONTEST

Overview

CREATIVE TOPIC

LIVE CHALLENGE

2025 CONTEST

Overview

CREATIVE TOPIC

LIVE CHALLENGE

Dark: Events, Characters, and Timelines

Visualize the story of the Netflix show
Dark on the circular screen in the
Decision Arena.

2025 CONTEST

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LIVE CHALLENGE

Find a k -planar straight-line drawing of
a graph that minimizes k . The vertices
should be placed on a grid.

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manual category

automatic category

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12 submissions

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manual category

14 submissions

automatic category

2025 CONTEST

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12 submissions

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manual category

14 submissions

automatic category

8 submissions

2025 CONTEST

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GRAPH DRAWING CONTEST

Creative Topic

GRAPH DRAWING CONTEST

Creative Topic

Visualize events of Netflix show *Dark*

GRAPH DRAWING CONTEST

Creative Topic

Visualize events of Netflix show *Dark*



GRAPH DRAWING CONTEST

Creative Topic

Visualize events of Netflix show *Dark*



GRAPH DRAWING CONTEST

Creative Topic

Visualize events of Netflix show *Dark*

ID	World	Date	Important Trigger	Death	Unknown Trigger	Description	Characters
237	Jonas	21-06-2020	☐	☐	☐	Wöller brings the radioactive waste back to the power plant	Torben Wöller
238	Jonas	21-06-2020	☒	☐	☐	Aleksander has the waste covered in concrete	aleksander tiedemann
239	Jonas	22-06-2020	☐	☐	☐	Clausen and Adult Charlotte interview Adult Regina, who tells them about Adult Jonas and shows them the bunker	W. Clausen charlotte doppler regina tiedemann
240	Jonas	22-06-2020	☐	☐	☐	Charlotte and Peter move all investigation's files to the bunker	charlotte doppler peter doppler
241	Jonas	24-06-2020	☐	☐	☐	Magnus, Martha, Franziska, and Child Elisabeth go to the caves where they run into Bartosz	magnus nielsen martha nielsen (J) franziska doppler elisabeth doppler
242	Jonas	24-06-2020	☐	☐	☐	They leave Bartosz tied up and take the time machine from him	magnus nielsen martha nielsen (J) franziska doppler elisabeth doppler
243	Jonas	24-06-2020	☐	☐	☐	Adult Jonas finds Adult Hannah's gun	jonas kahnwald/adam (J) hannah kahnwald
244	Jonas	24-06-2020	☐	☐	☐	Adult Charlotte takes Adult Hannah and Adult Jonas to the bunker and shows them all the files she has	charlotte doppler hannah kahnwald jonas kahnwald/adam (J)
245	Jonas	24-06-2020	☐	☐	☐	Charlotte brings Katharina to the bunker and they explain everything to her but she doesn't believe them	charlotte doppler katharina nielsen hannah kahnwald jonas kahnwald/adam (J)
246	Jonas	24-06-2020	☐	☐	☐	Katharina goes to the school records to look up Michael and finds the picture of Child Mikkell in a photo	katharina nielsen
247	Jonas	24-06-2020	☐	☐	☐	Clausen and Wöller interview Adult Aleksander, with most questions being about his past	W. Clausen Torben Wöller aleksander tiedemann
248	Jonas	25-06-2020	☐	☐	☐	they go into the caves to get answers from Bartosz, who tells them about the time machine. Bartosz also tells them about the power plant	magnus nielsen martha nielsen (J) franziska doppler elisabeth doppler
249	Jonas	25-06-2020	☐	☐	☐	Adult Jonas goes to Martha's bedroom and leaves the St. Christopher necklace for her	jonas kahnwald/adam (J)
250	Jonas	25-06-2020	☐	☐	☐	Martha finds the necklace Adult Jonas left for her	martha nielsen (J)
251	Jonas	25-06-2020	☐	☐	☐	Adult Jonas confronts Adult Hannah about not loving Michael/Mikkell and her affair with Adult Ulrich	jonas kahnwald/adam (J) hannah kahnwald
252	Jonas	25-06-2020	☐	☐	☐	Adult Noah tells Charlotte that he's her father and that he plans on killing Adam so that everyone can live	noah/hanno tauber charlotte doppler
253	Jonas	26-06-2020	☐	☐	☐	Charlotte tells Adult Peter about Adult Noah and the apocalypse	charlotte doppler peter doppler
254	Jonas	26-06-2020	☐	☐	☐	Martha meets Adult Jonas, who reveals his true identity to her	martha nielsen (J) jonas kahnwald/adam (J)
255	Jonas	26-06-2020	☐	☐	☐	Adult Hannah steals Adult Jonas' time machine and leaves for 1954.	hannah kahnwald
256	Jonas	26-06-2020	☐	☐	☐	Teen Magnus brings the time machine to Martha and Adult Katharina.	magnus nielsen martha nielsen (J) katharina nielsen
257	Jonas	26-06-2020	☐	☐	☐	Clausen arrests Adult Aleksander for identity theft	W. Clausen aleksander tiedemann
258	Jonas	26-06-2020	☐	☐	☐	Clausen reveals that his brother, Aleksander Köhler, disappeared in 1986 and that's whose identity he stole	W. Clausen aleksander tiedemann
259	Jonas	26-06-2020	☐	☐	☐	Clausen says he knew to go to Winden to look for him because he had received a letter from an unknown person	W. Clausen aleksander tiedemann
260	Jonas	27-06-2020	☐	☐	☐	Clausen gets a search warrant for the power plant and has them dig up the radioactive waste	W. Clausen
261	Jonas	27-06-2020	☐	☐	☐	The God Particle is created and stabilized	

GRAPH DRAWING CONTEST

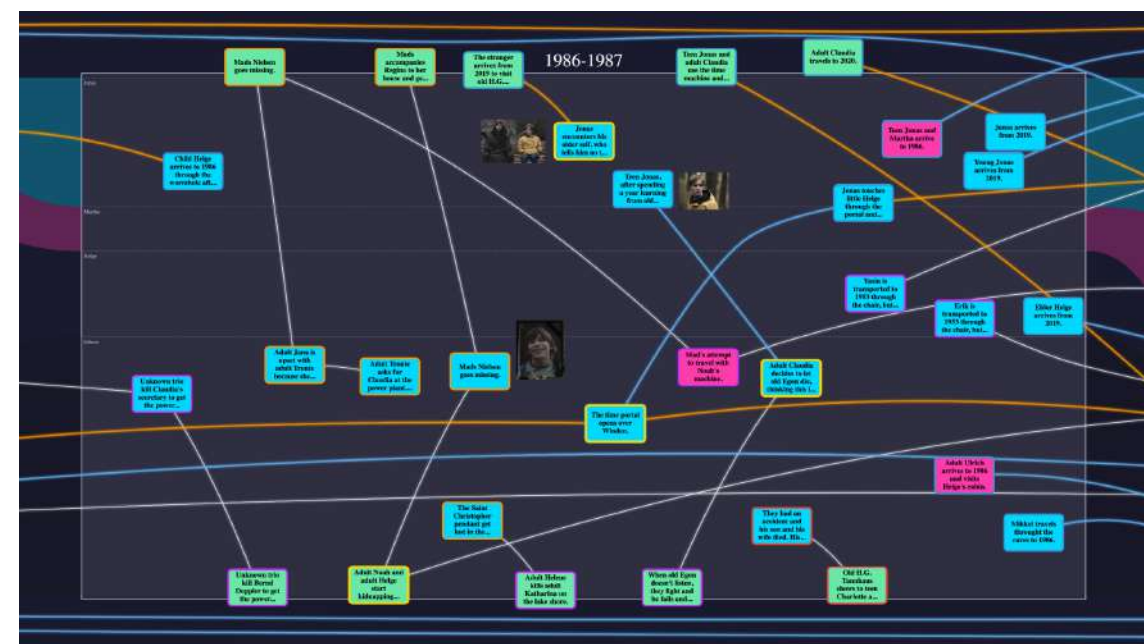
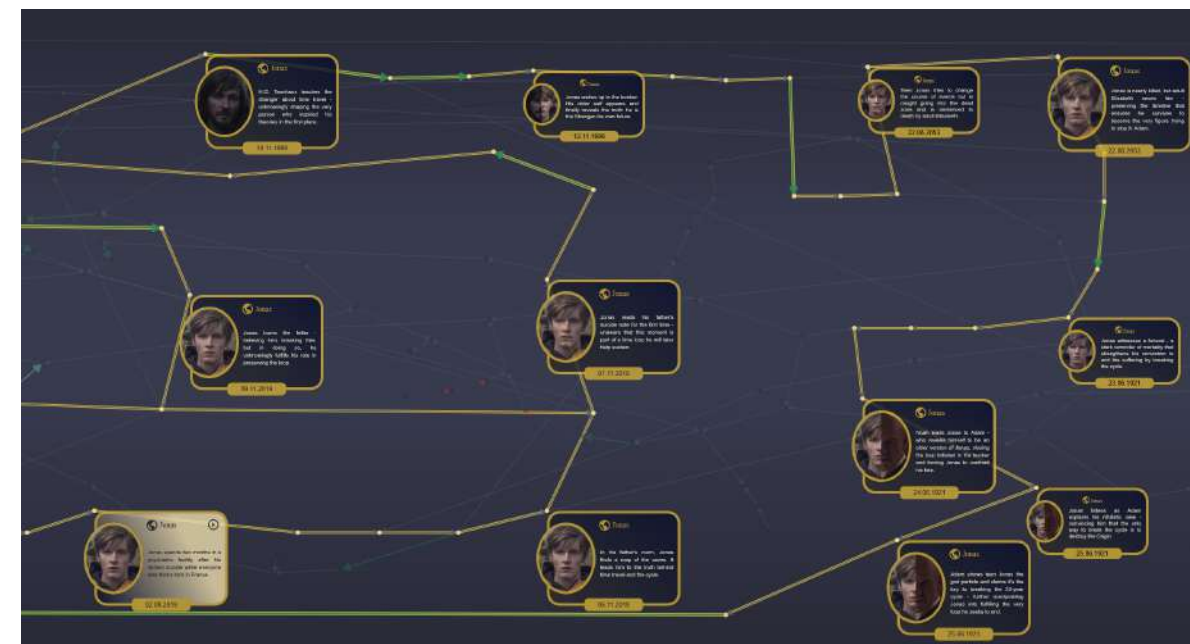
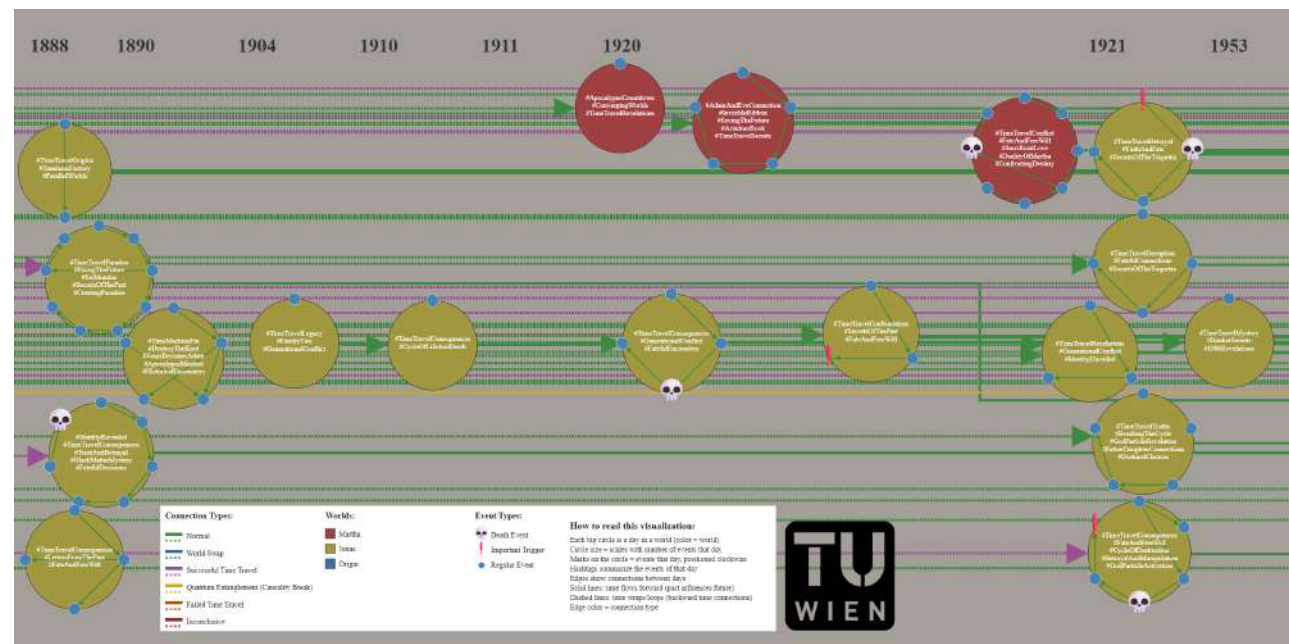
Creative Topic

Visualize events of Netflix show *Dark*



Dark: Events, Characters, and Timelines

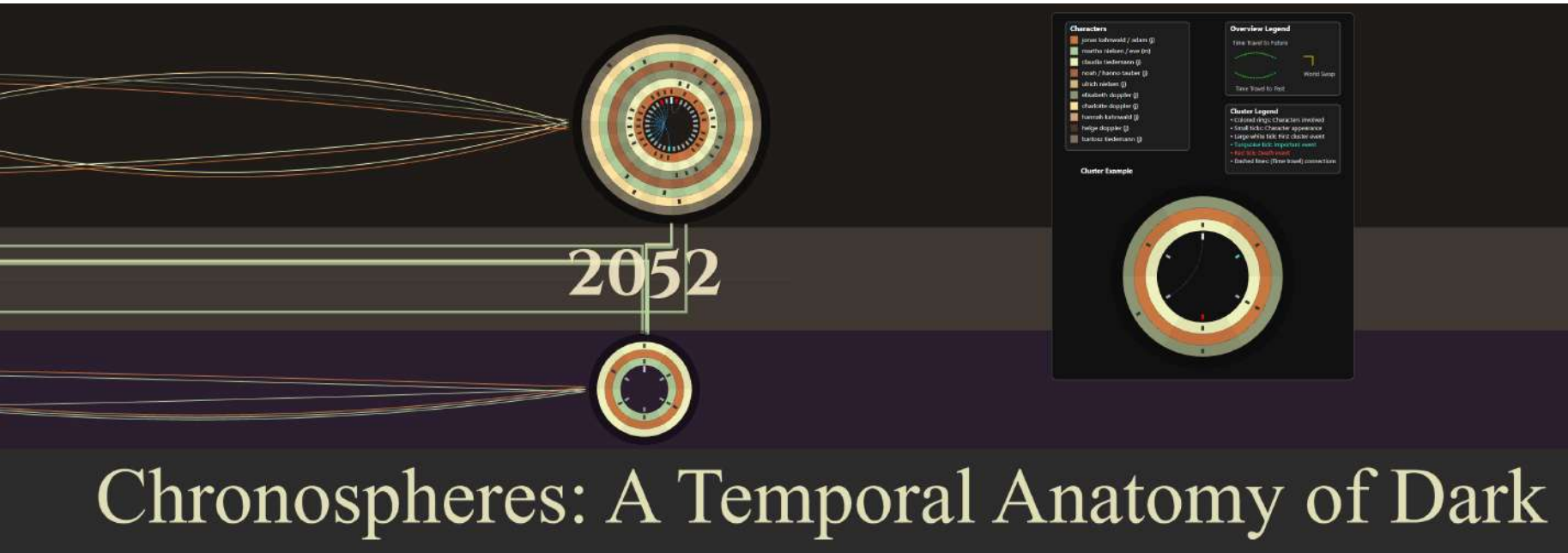
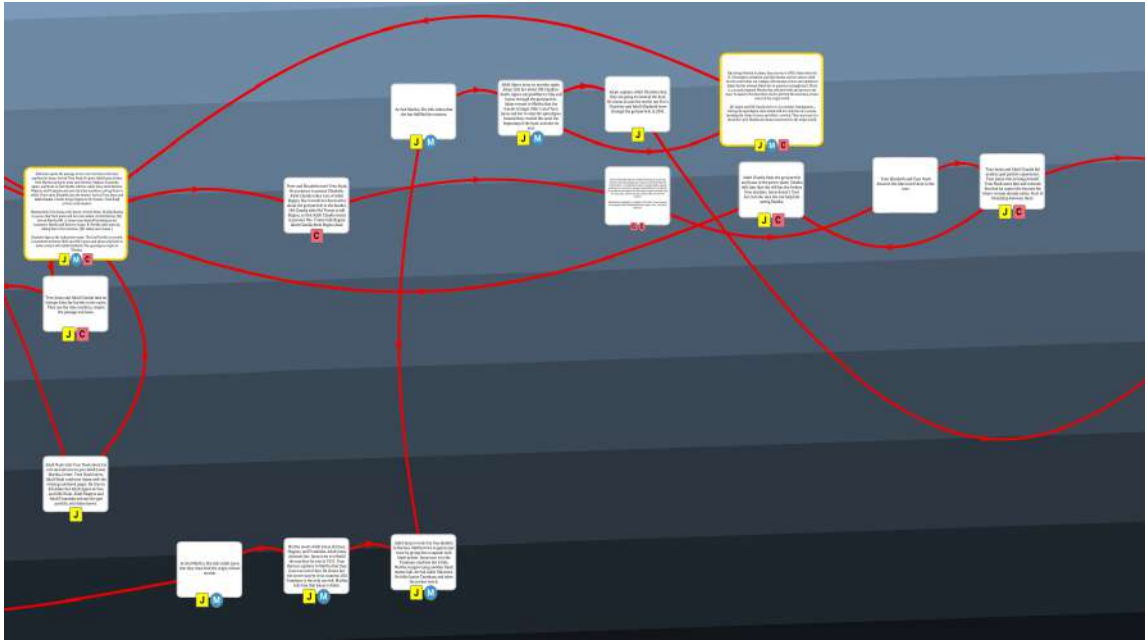
Outside of Top 6



CREATIVE TOPIC

Dark: Events, Characters, and Timelines

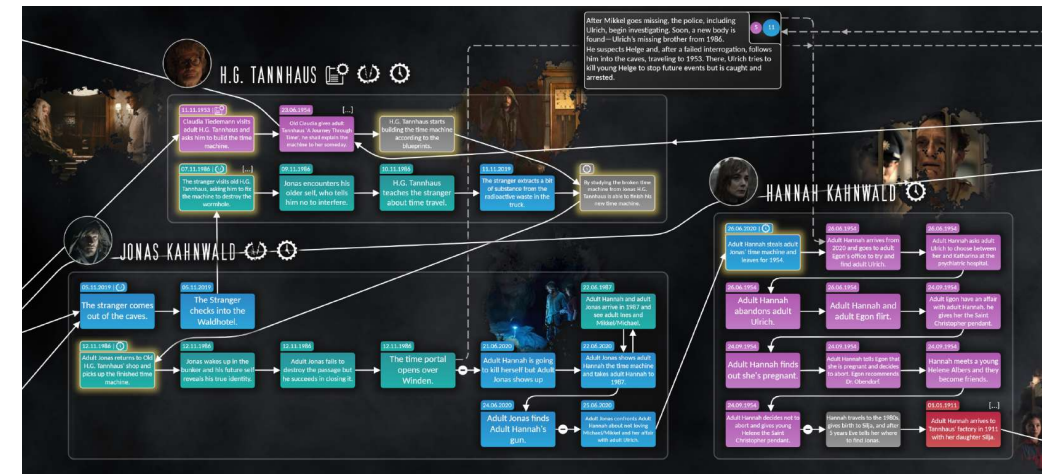
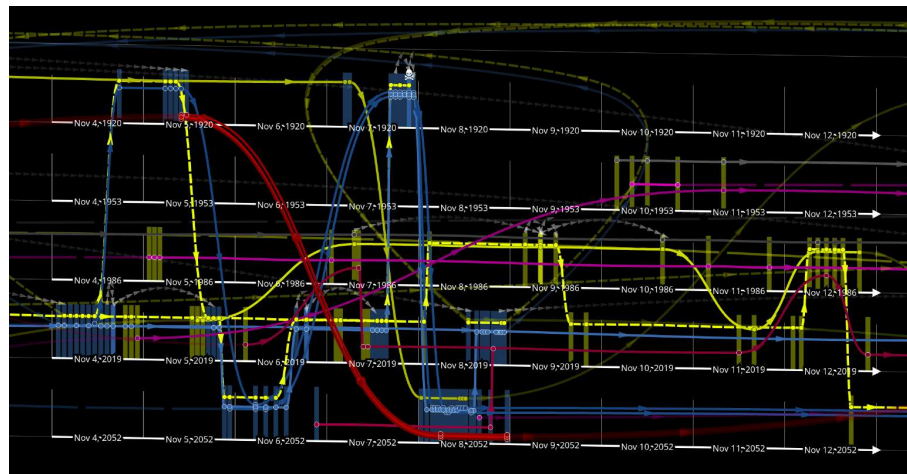
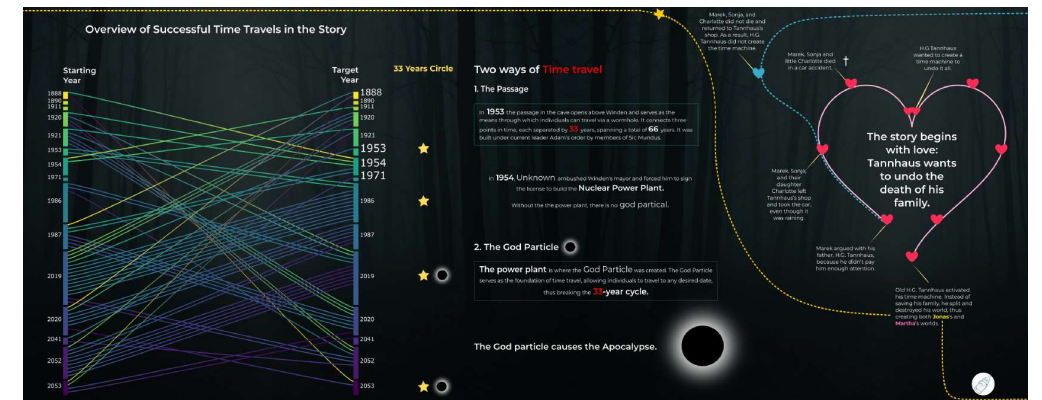
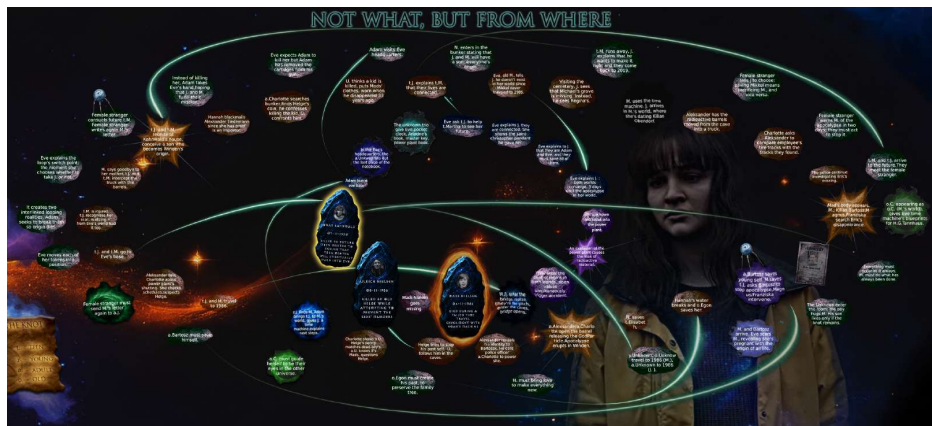
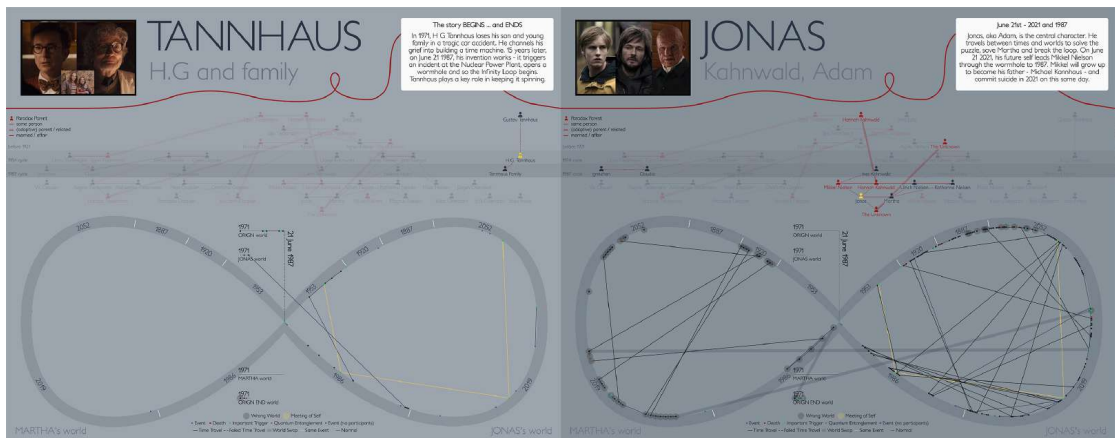
Outside of Top 6



CREATIVE TOPIC

Dark: Events, Characters, and Timelines

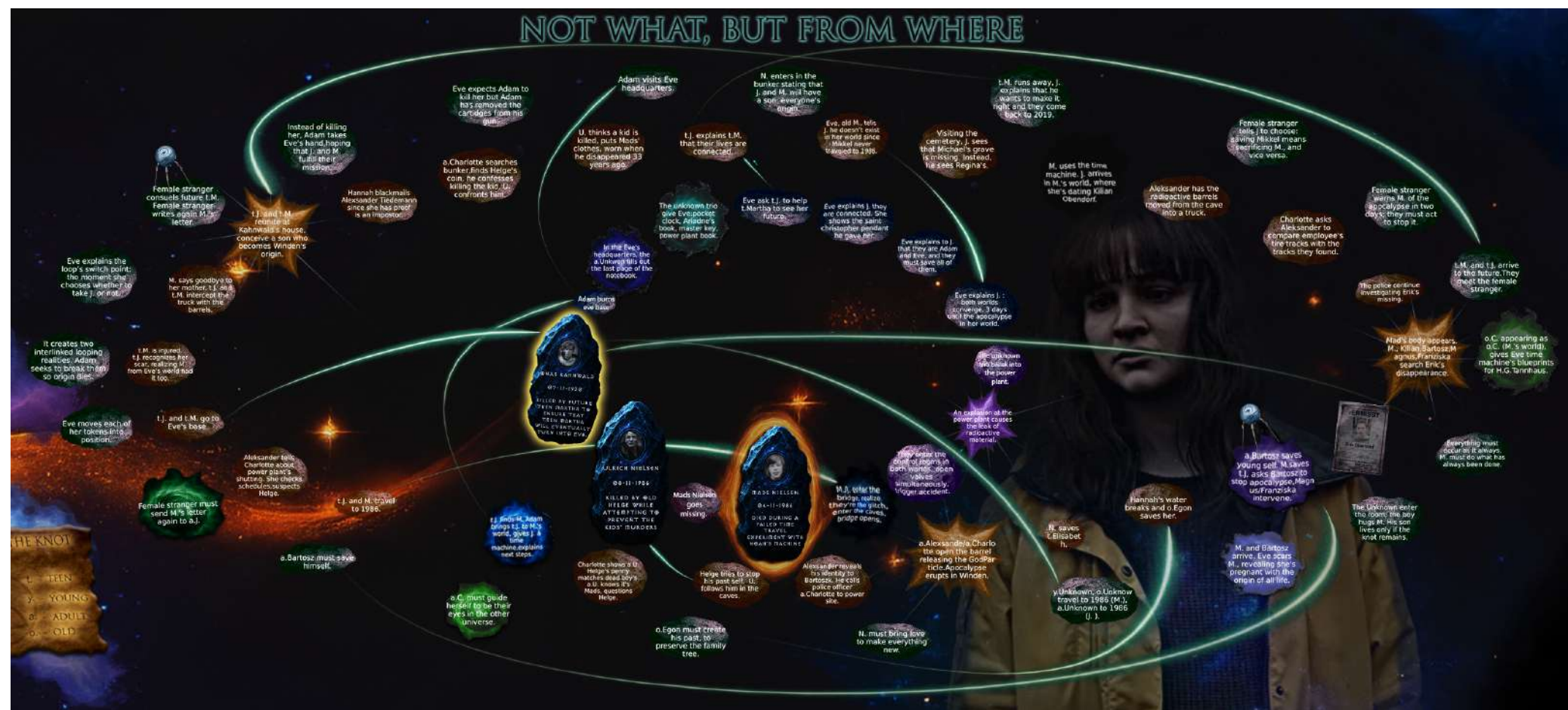
Top 6



CREATIVE TOPIC

Dark: Events, Characters, and Timelines

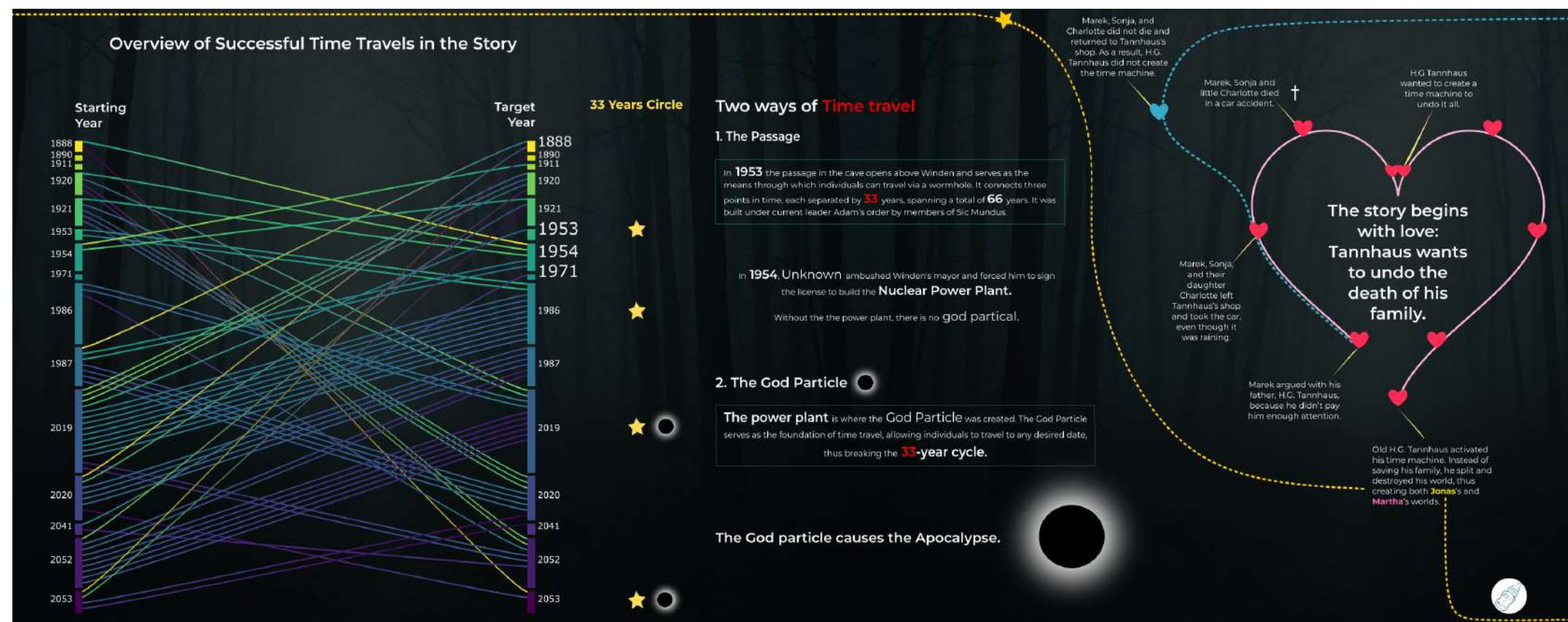
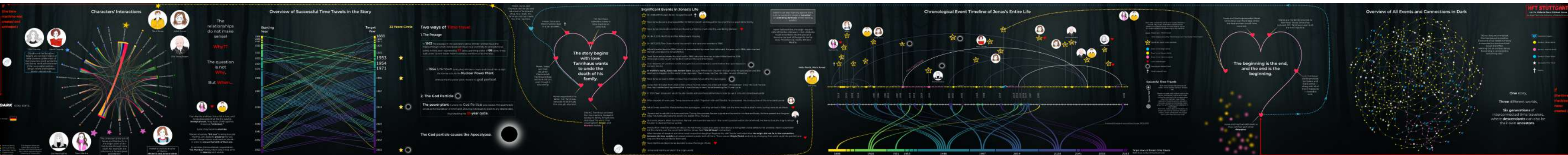
4th Place



Konstantina Kyriakidou
Konstantina Roussa
Christina Tsolaki
(University of Ioannina)

CREATIVE TOPIC

Dark: Events, Characters, and Timelines 4th Place



Lin Ye
Melanie Baur
Michael Krone
(HFT Stuttgart)

CREATIVE TOPIC

Dark: Events, Characters, and Timelines

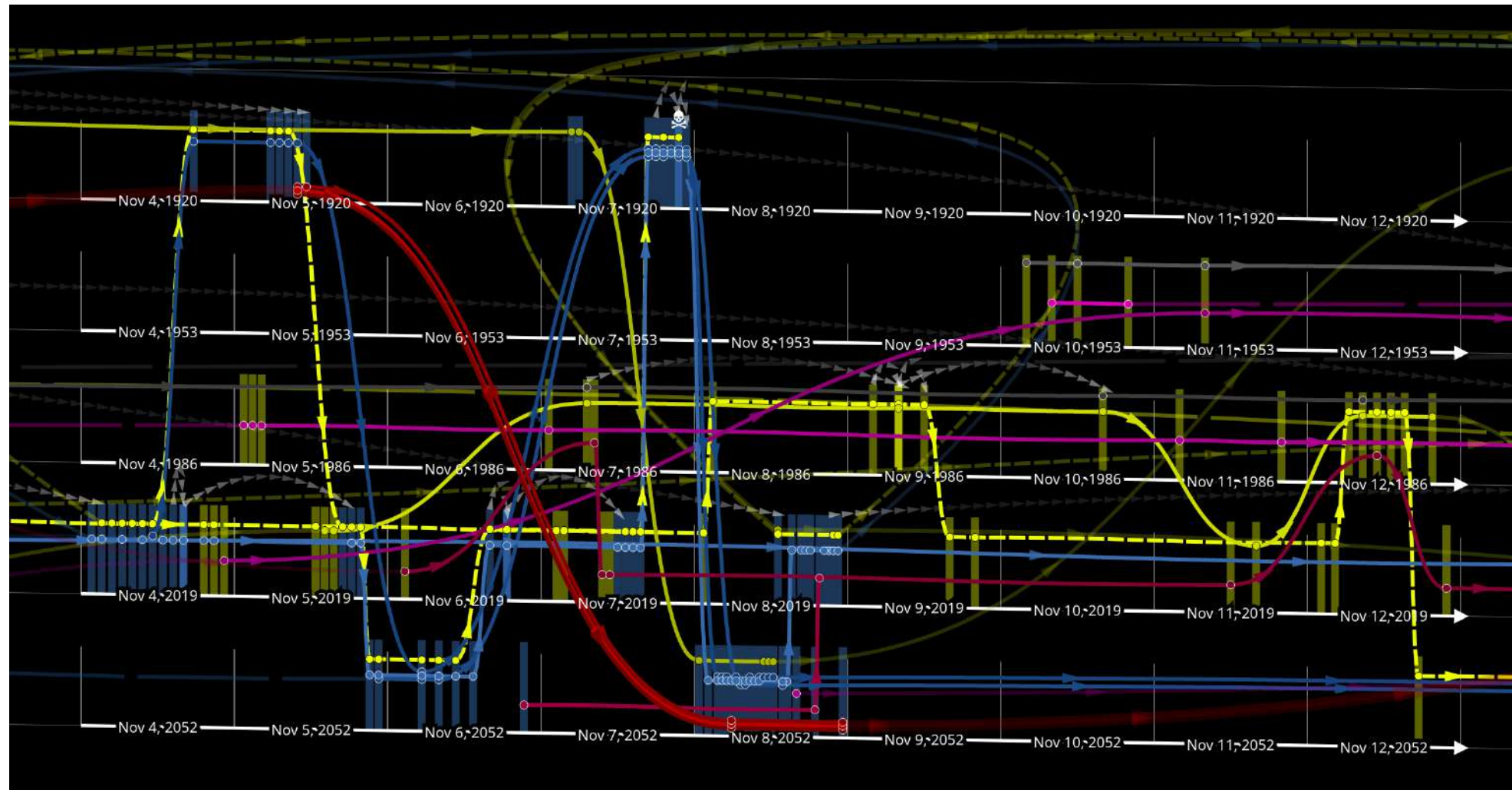
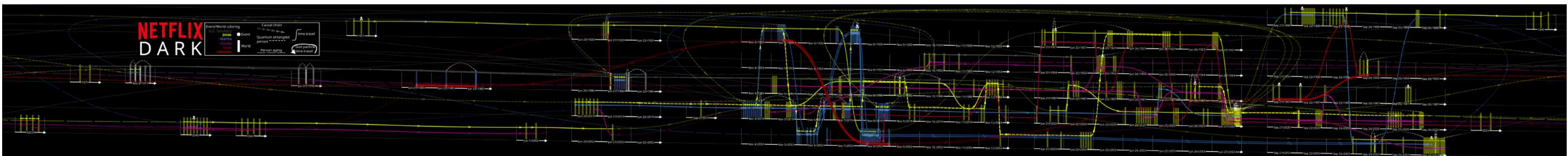
4th Place



Miltos Kalympas
Maria Eleni Pavliadi
Christos Tasioudis
(University of Ioannina)

CREATIVE TOPIC

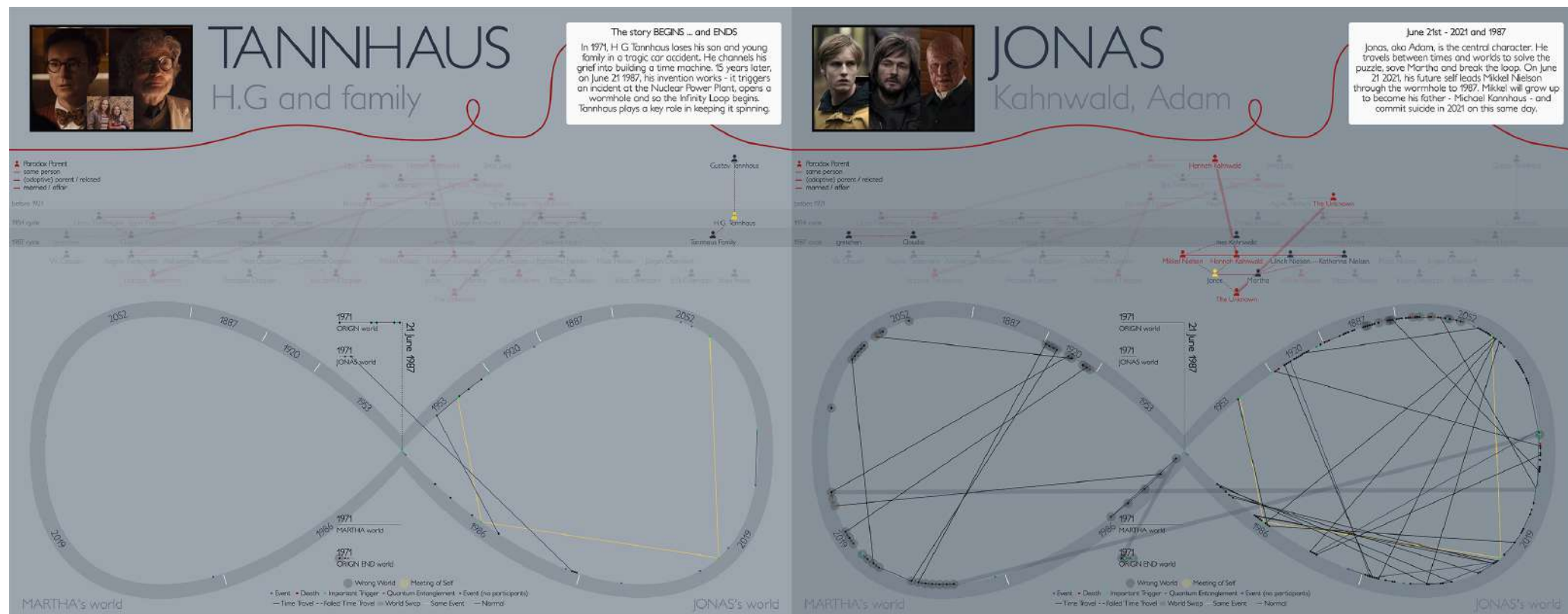
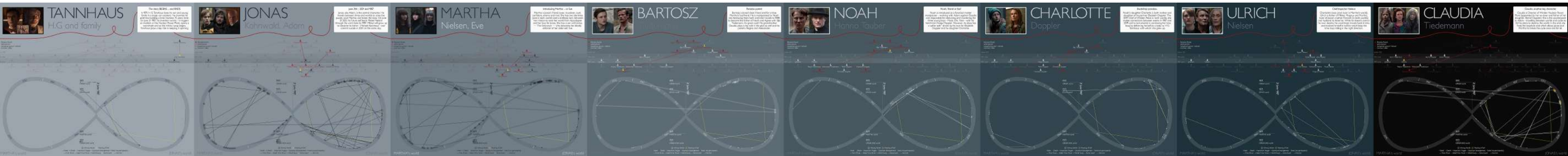
Dark: Events, Characters, and Timelines 3rd Place



Tom Baumgartl
Luke Watkin
George Bell
Daniel Archambault
Alma Cantu
Tatiana von Landesberger
(University of Cologne
Newcastle University)

CREATIVE TOPIC

Dark: Events, Characters, and Timelines 2nd Place

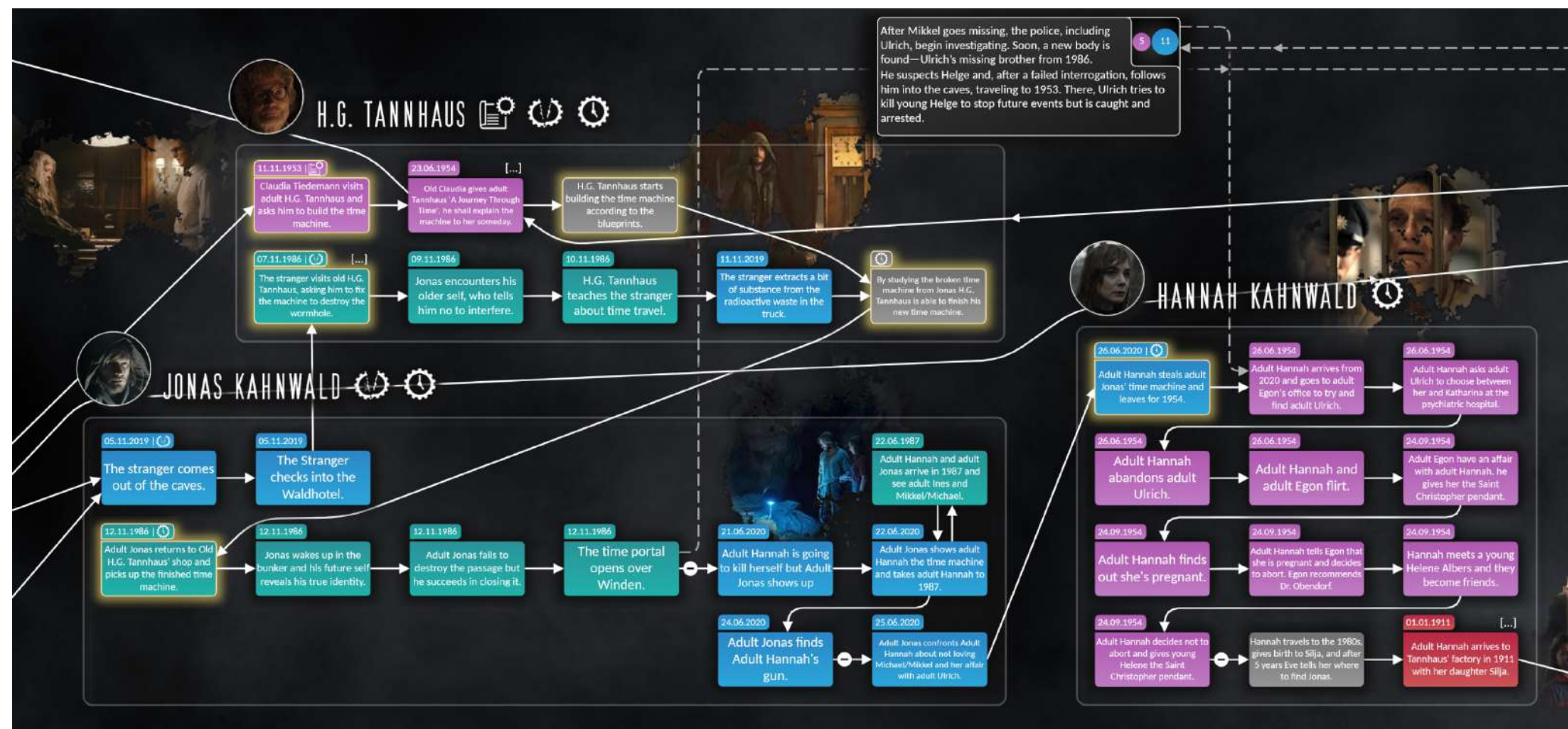
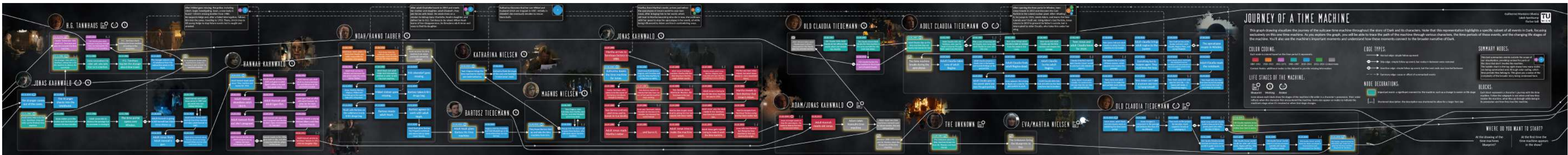


Bryony Miles
(BM Data Visualization)

CREATIVE TOPIC

Dark: Events, Characters, and Timelines

1st Place



Florian Saß
Jakob Speitkamp
Guilherme
Monteiro Oliveira
(TU Wien)

LIVE CHALLENGE

LIVE CHALLENGE

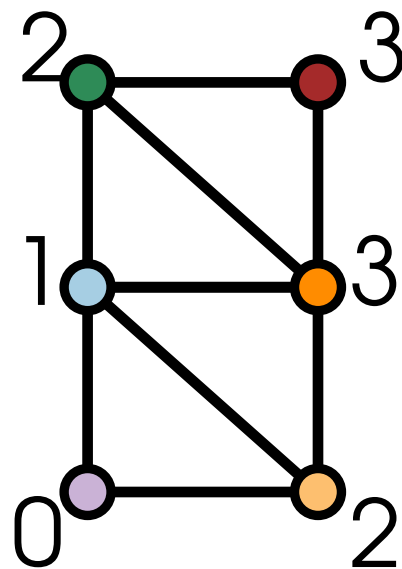
Compute k -planar drawings

- input: a graph G
- output: k -planar straight-line drawing of G
- objective: minimize k

LIVE CHALLENGE

Compute k -planar drawings

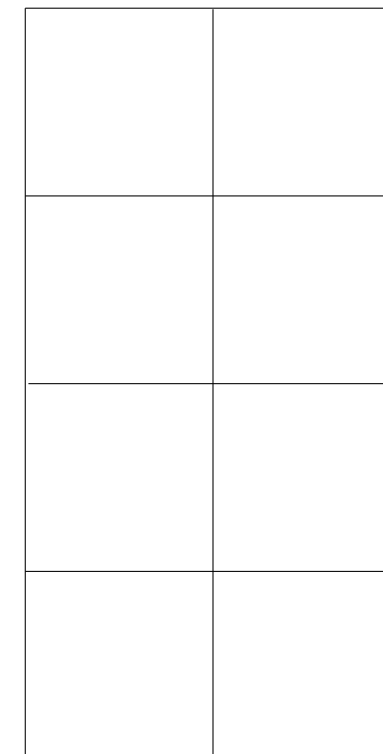
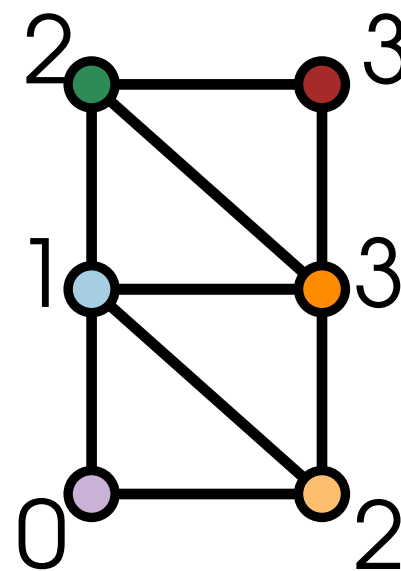
- input: a graph G
- output: k -planar straight-line drawing of G
- objective: minimize k



LIVE CHALLENGE

Compute k -planar drawings

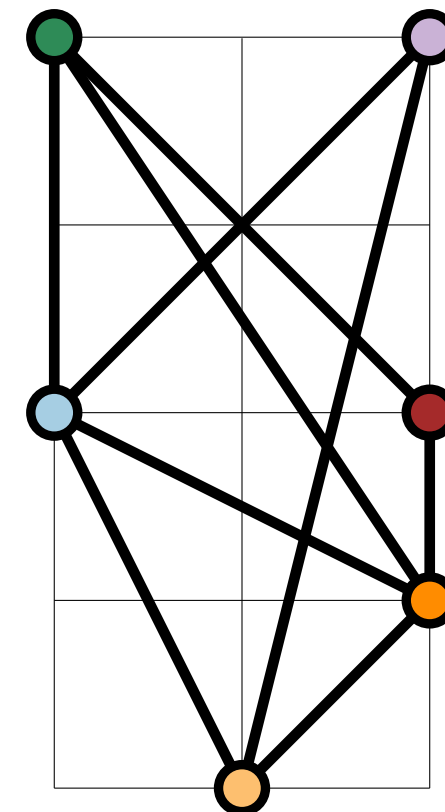
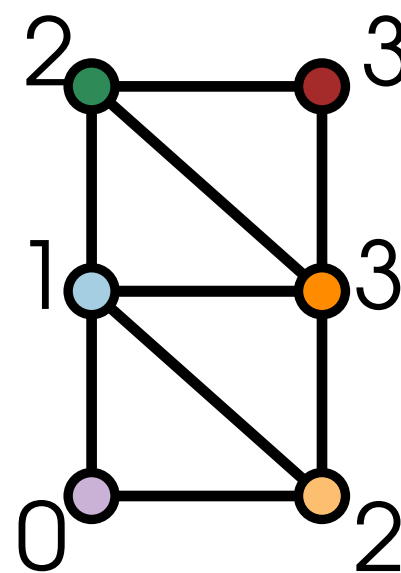
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LIVE CHALLENGE

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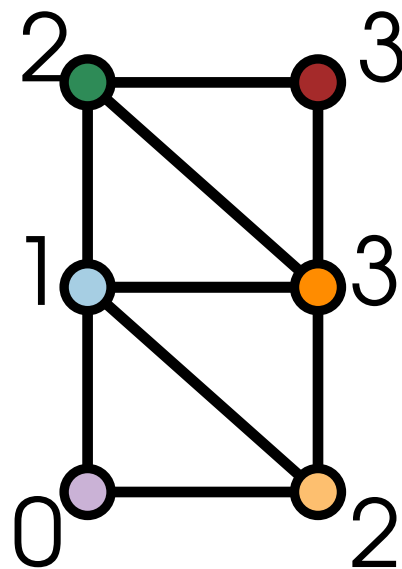
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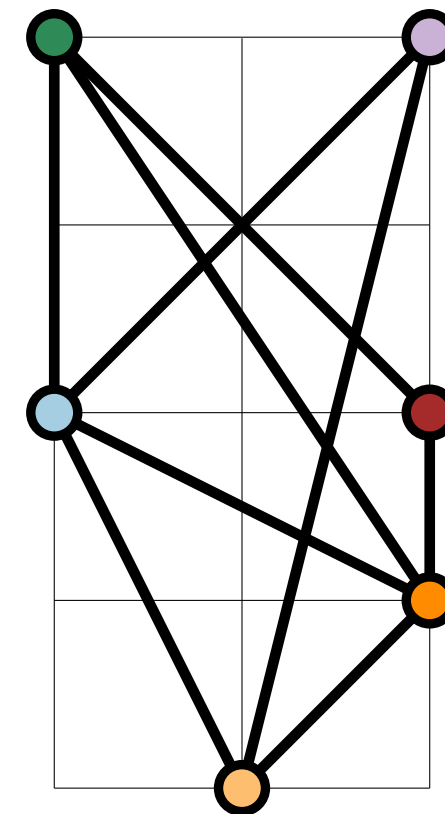
LIVE CHALLENGE

Compute k -planar drawings

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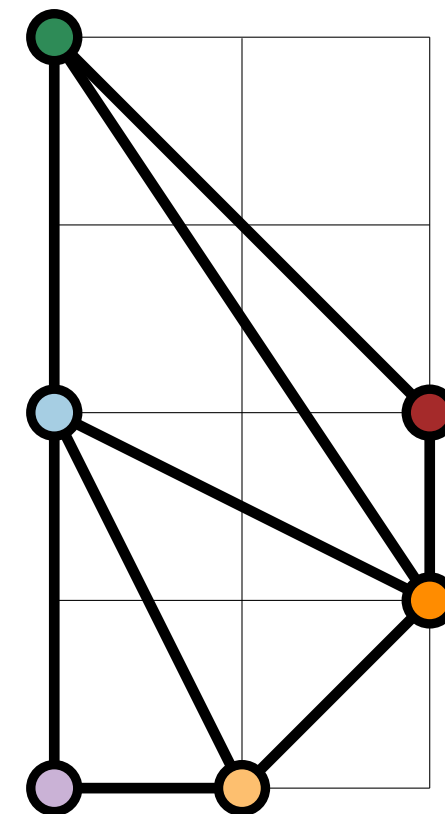
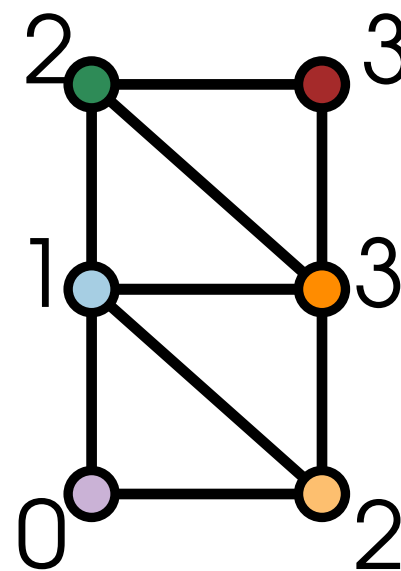
3-planar



LIVE CHALLENGE

Compute k -planar drawings

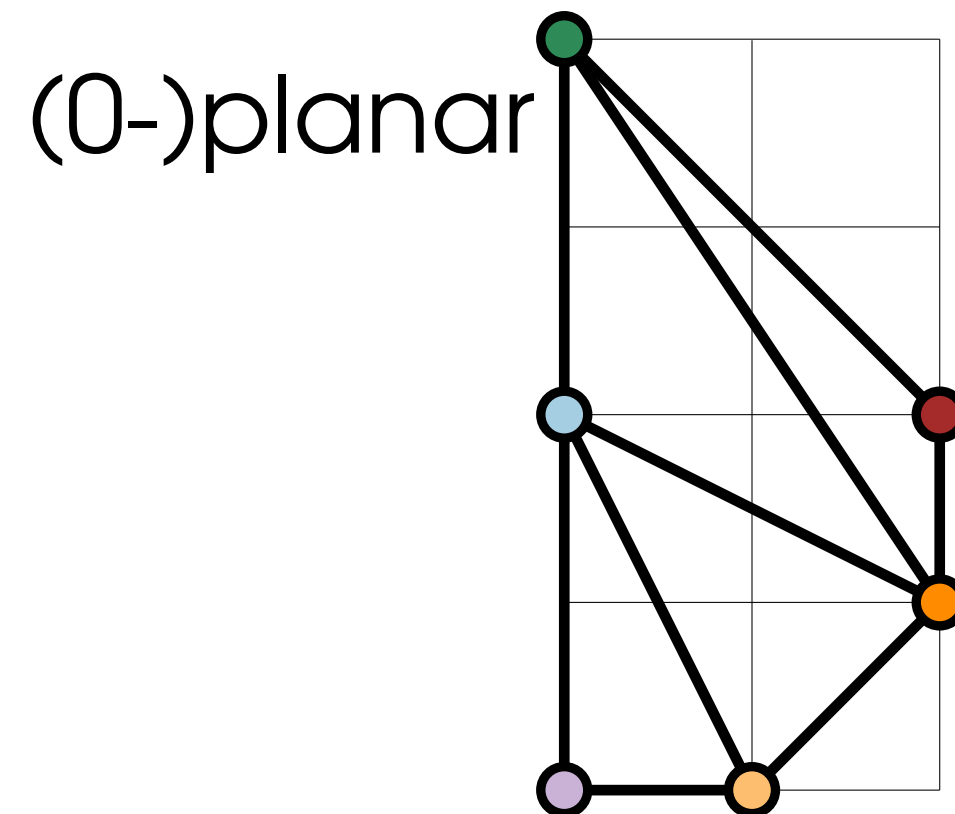
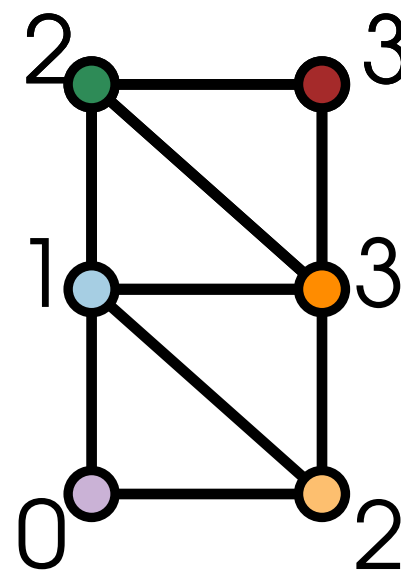
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LIVE CHALLENGE

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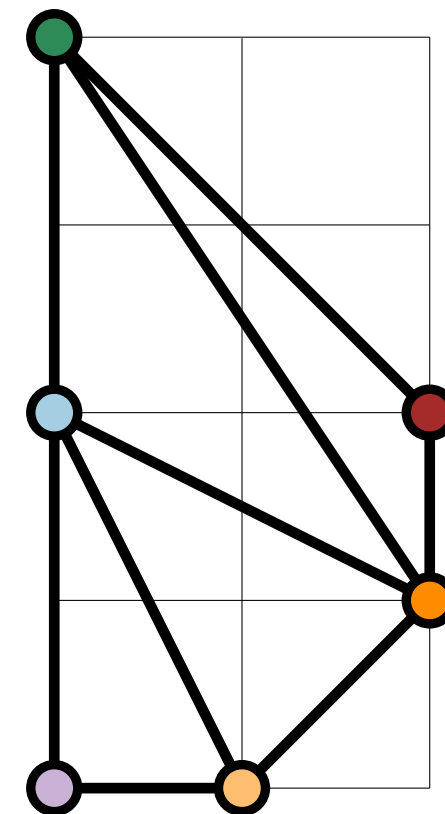
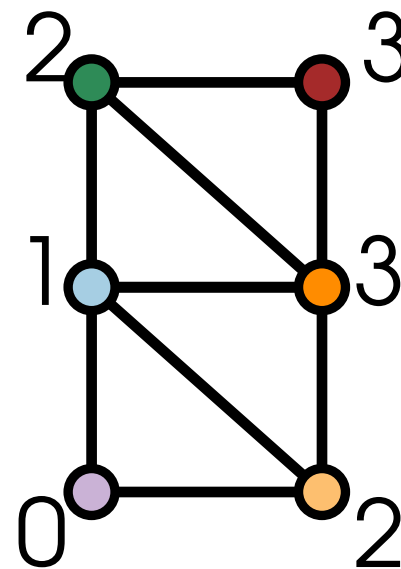
- input: a graph G
- output: k -planar straight-line drawing of G
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LIVE CHALLENGE

Compute k -planar drawings

- input: a graph G
- output: k -planar straight-line drawing of G
- objective: minimize k
- vertices must be on integer grid



LIVE CHALLENGE

Photos

LIVE CHALLENGE

Photos



LIVE CHALLENGE

Photos



LIVE CHALLENGE

Photos



LIVE CHALLENGE

Photos



LIVE CHALLENGE

Photos



LIVE CHALLENGE

Photos

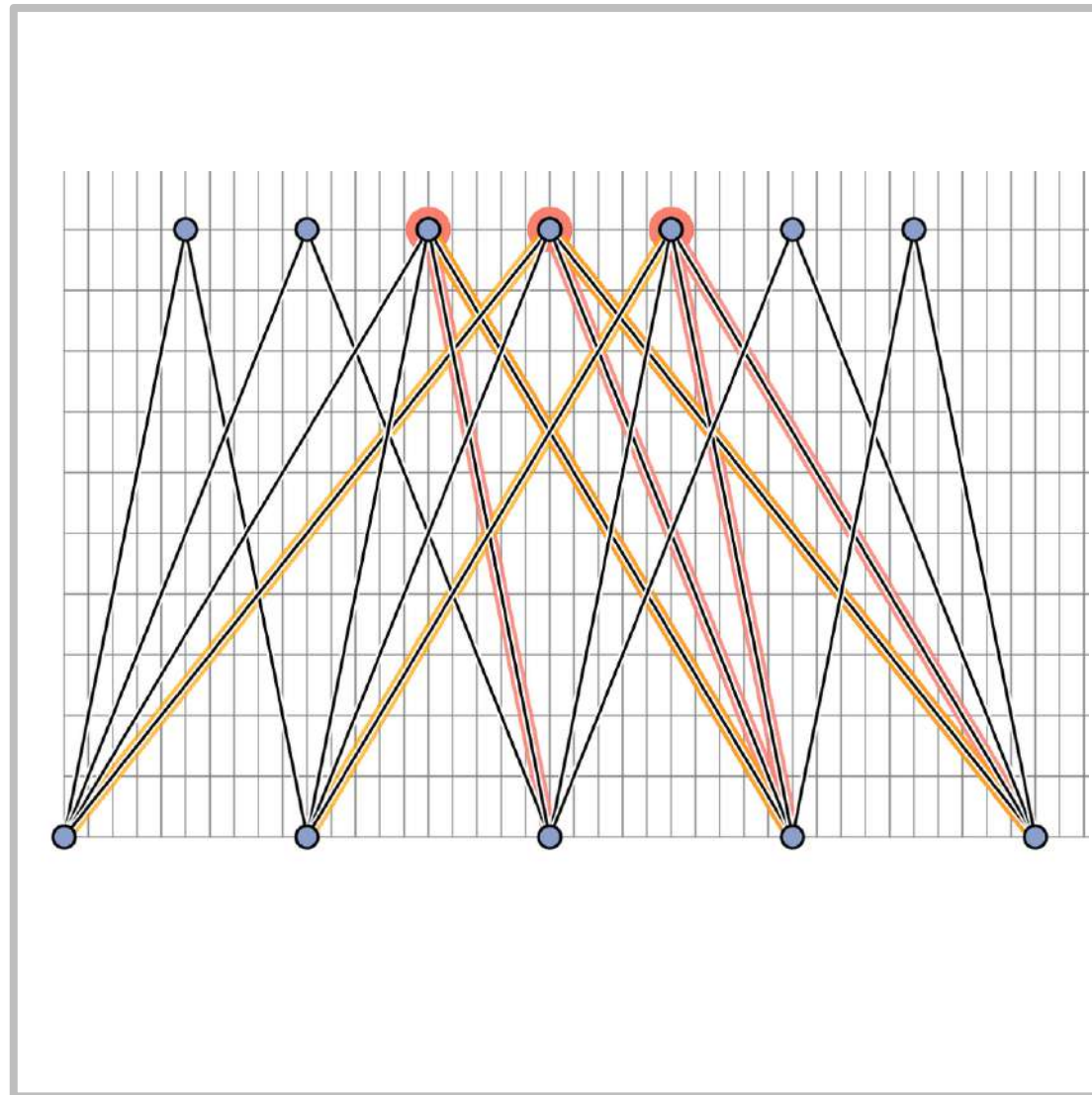


LIVE CHALLENGE

Manual category graphs

LIVE CHALLENGE

Manual category graphs



input

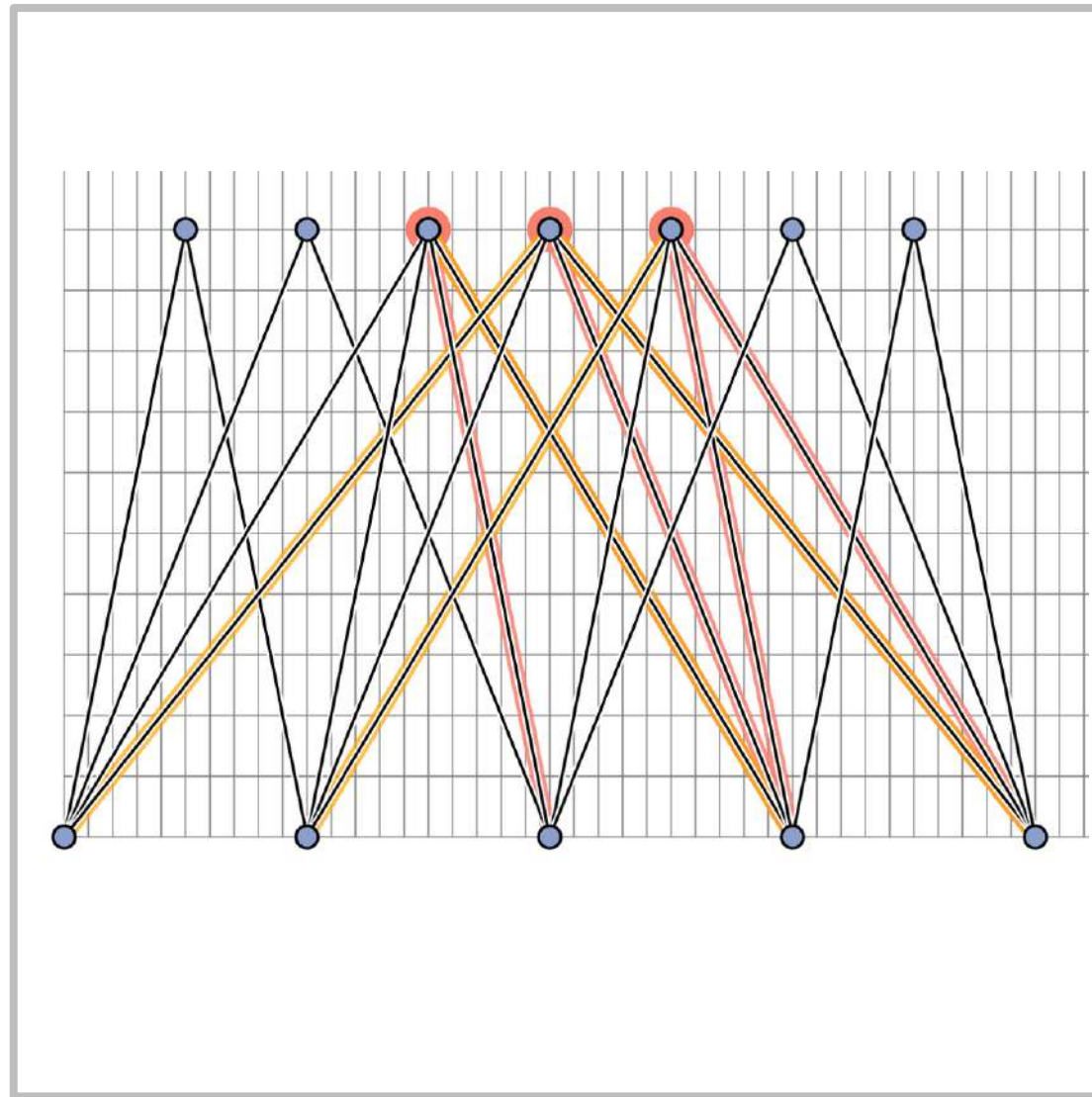
graph 1



best manual

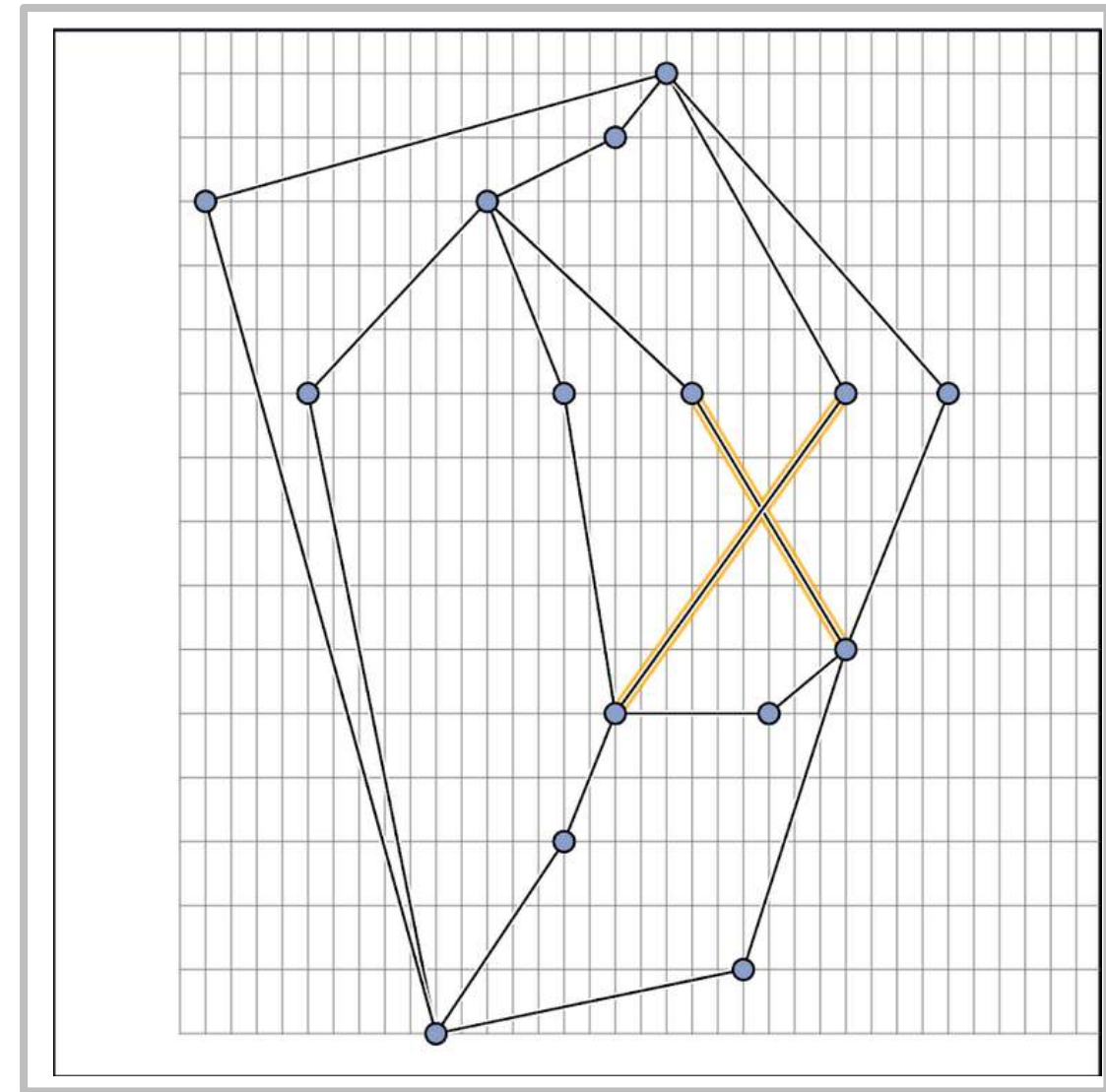
LIVE CHALLENGE

Manual category graphs



input

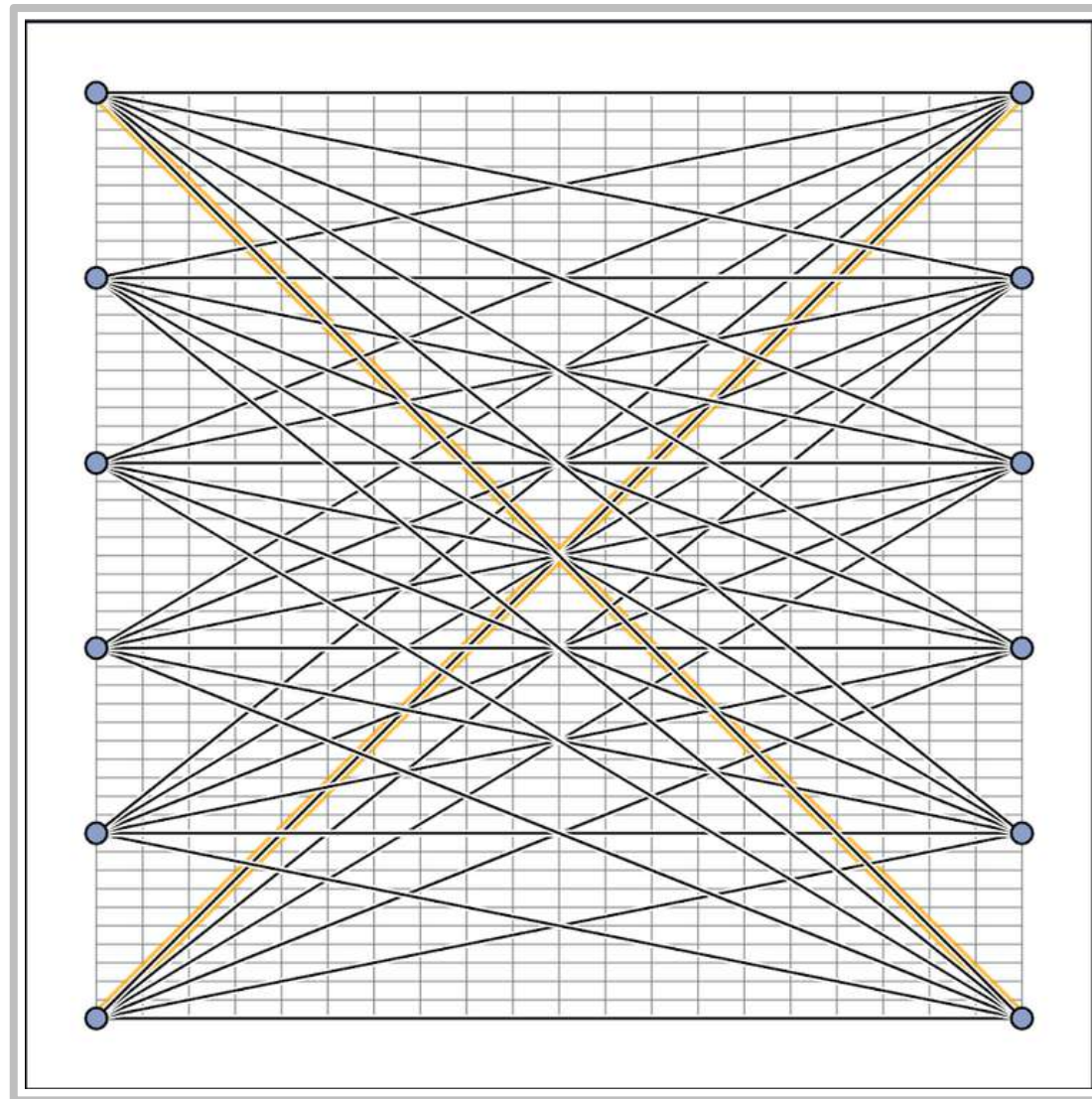
graph 1



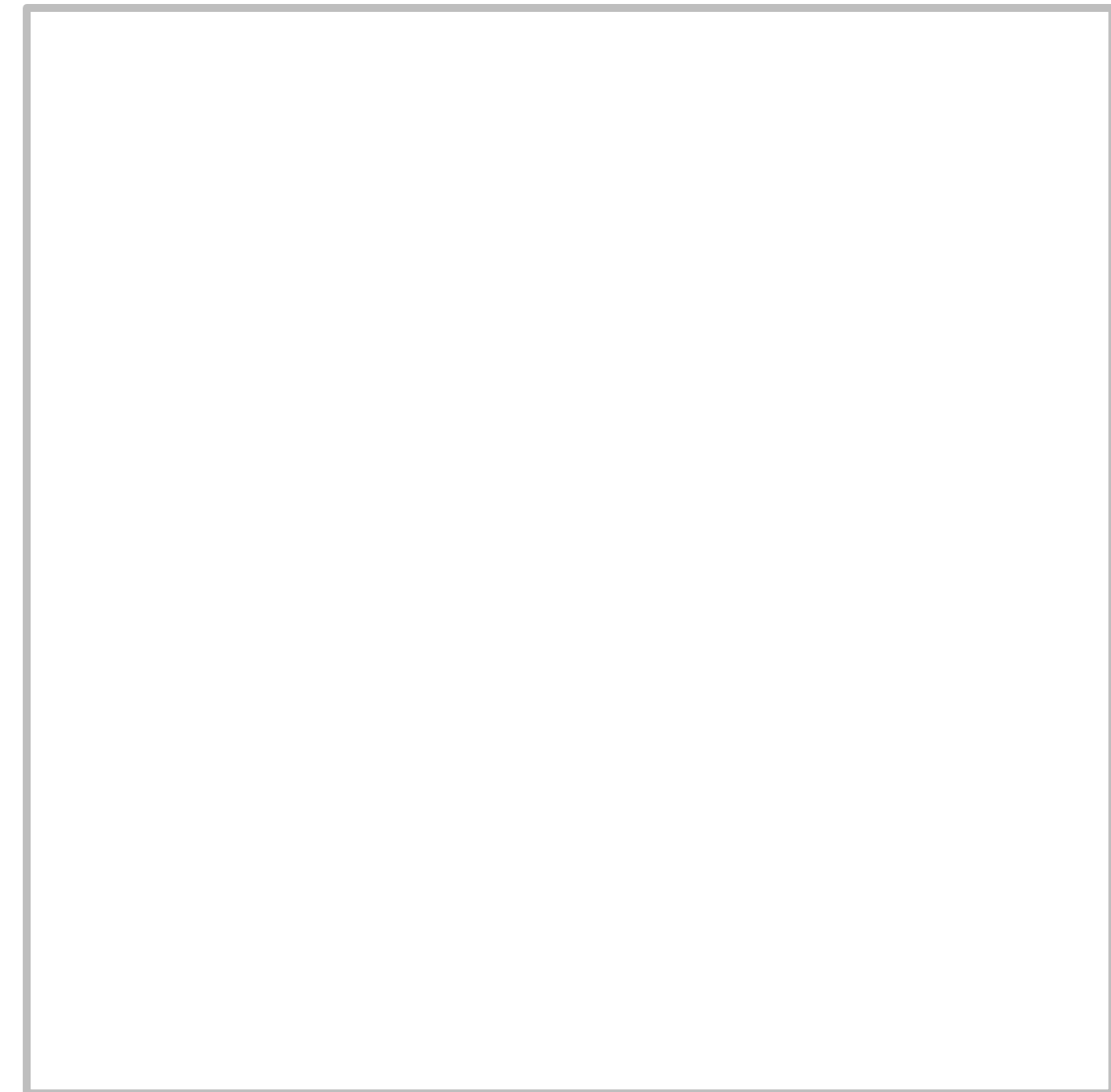
best manual
TUW Team 2
1-planar

LIVE CHALLENGE

Manual category graphs



input

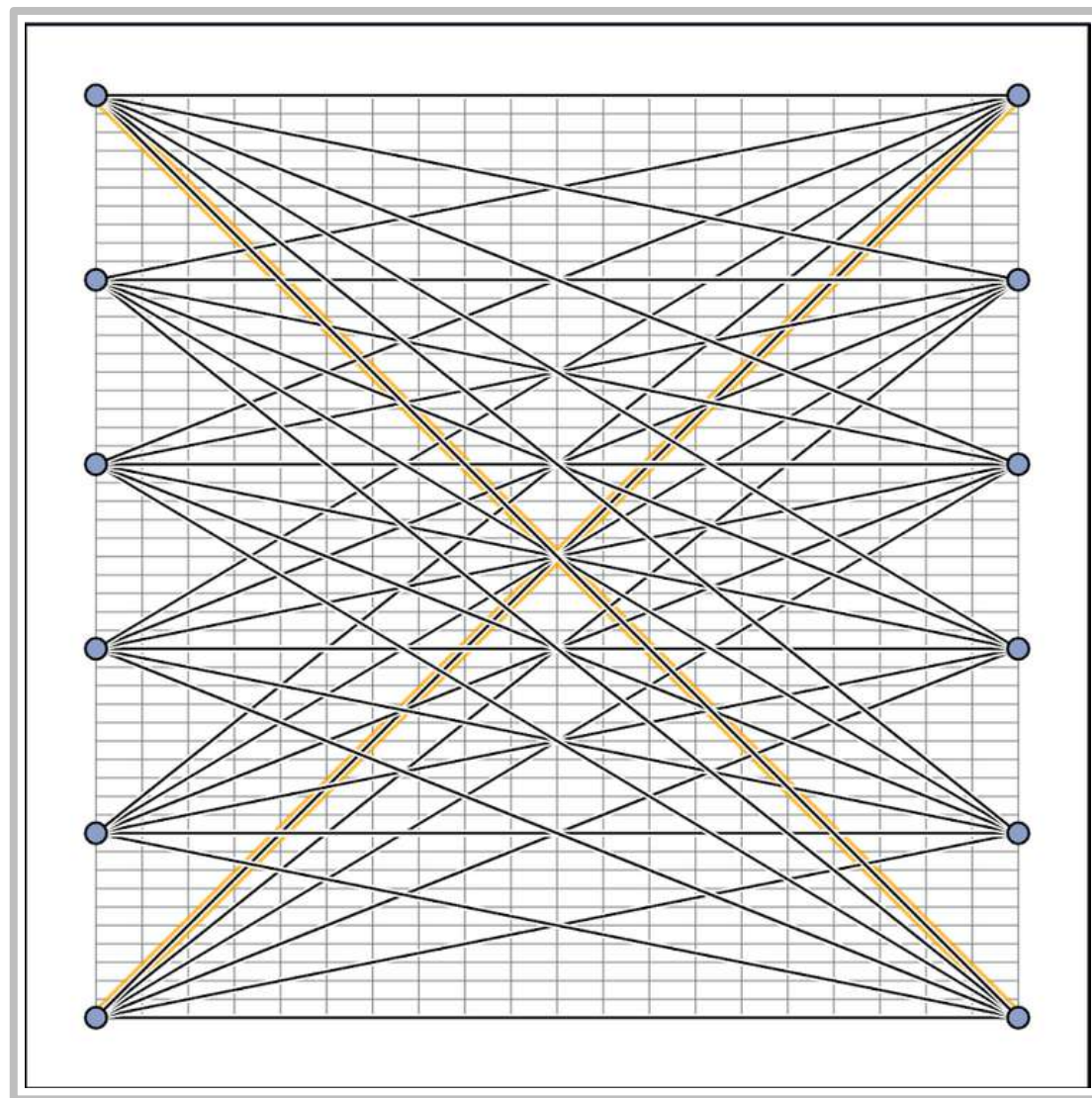


best manual

graph **2**

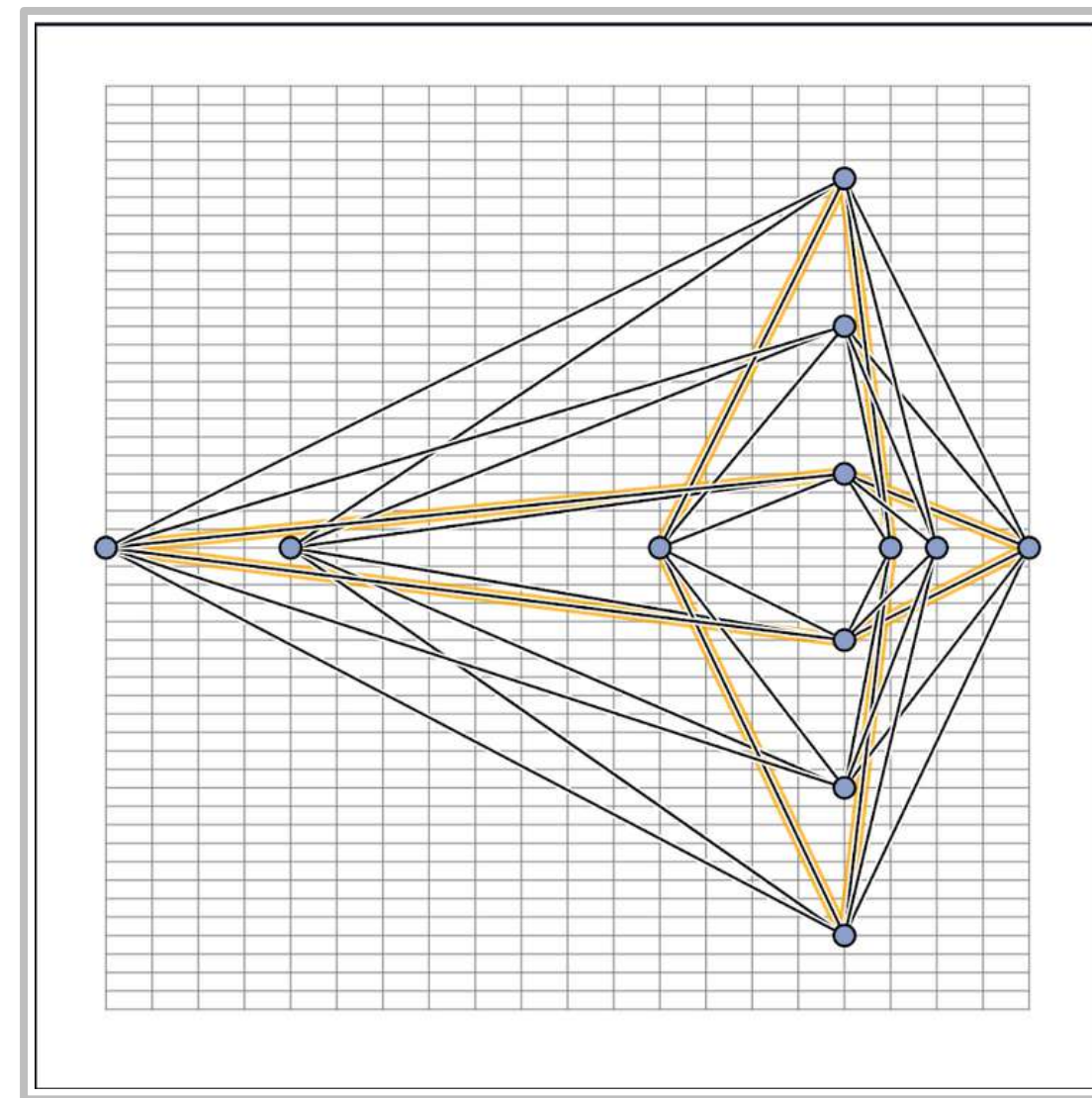
LIVE CHALLENGE

Manual category graphs



input

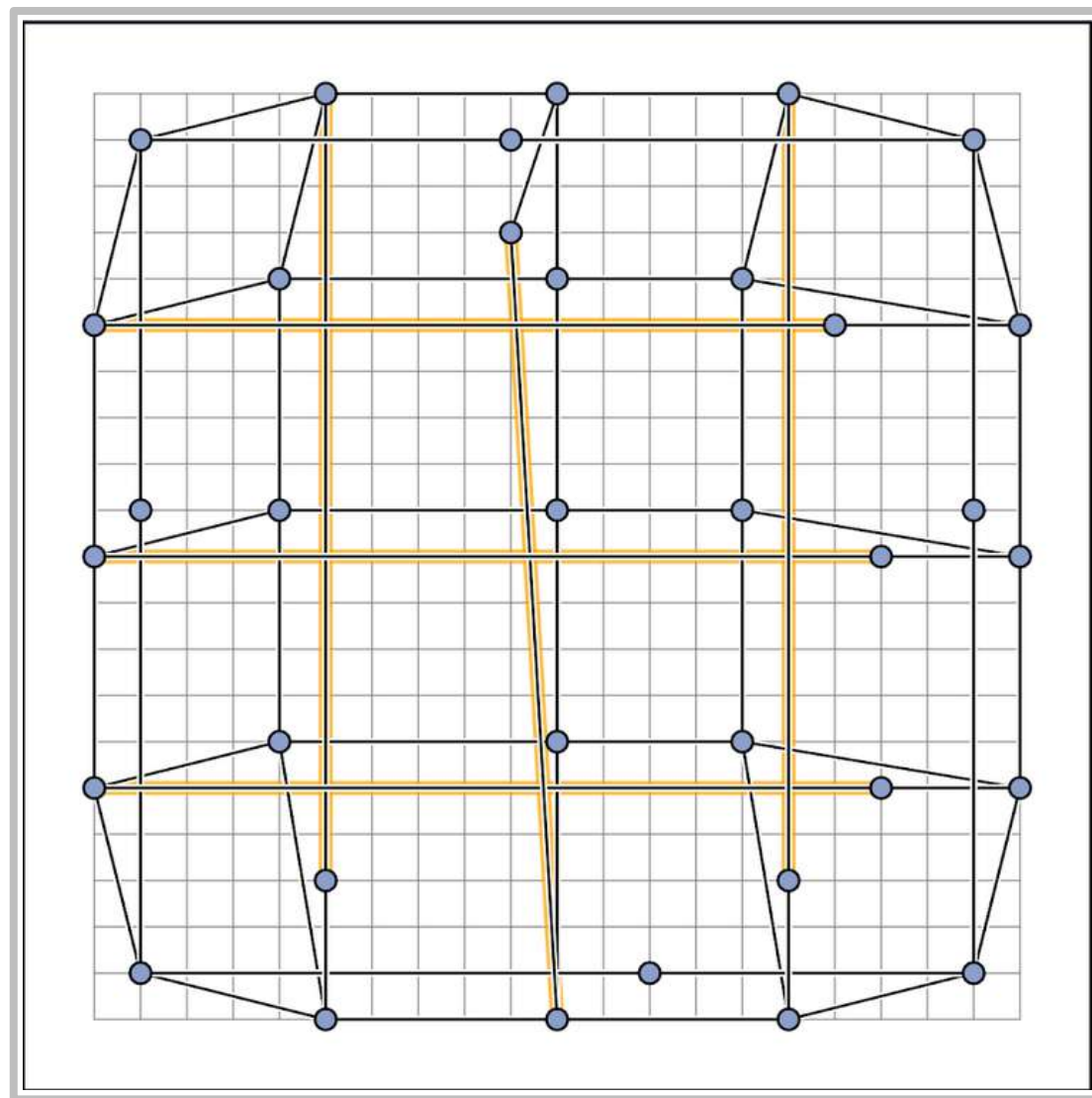
graph **2**



best manual
hot potato
4-planar

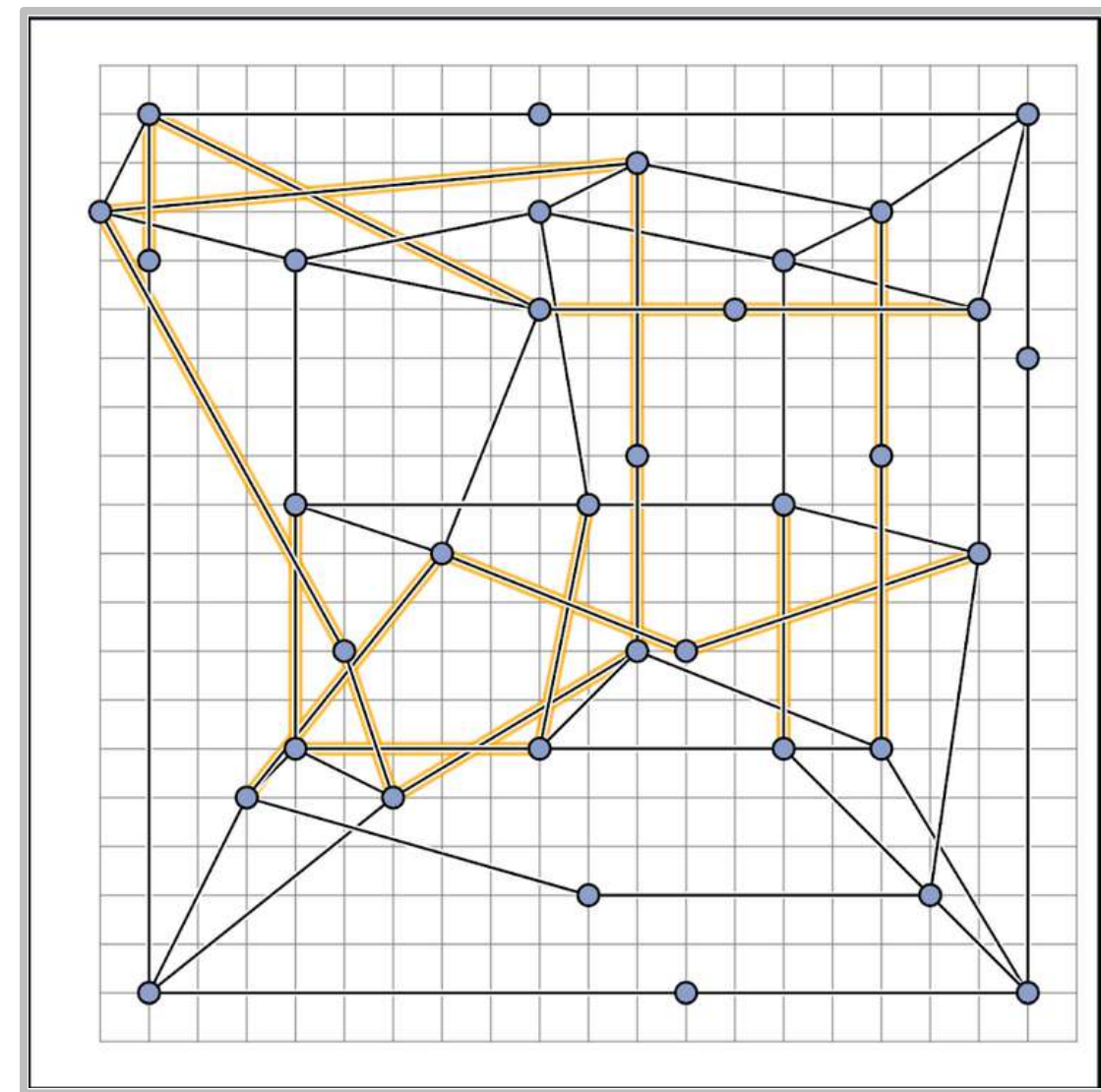
LIVE CHALLENGE

Manual category graphs



input

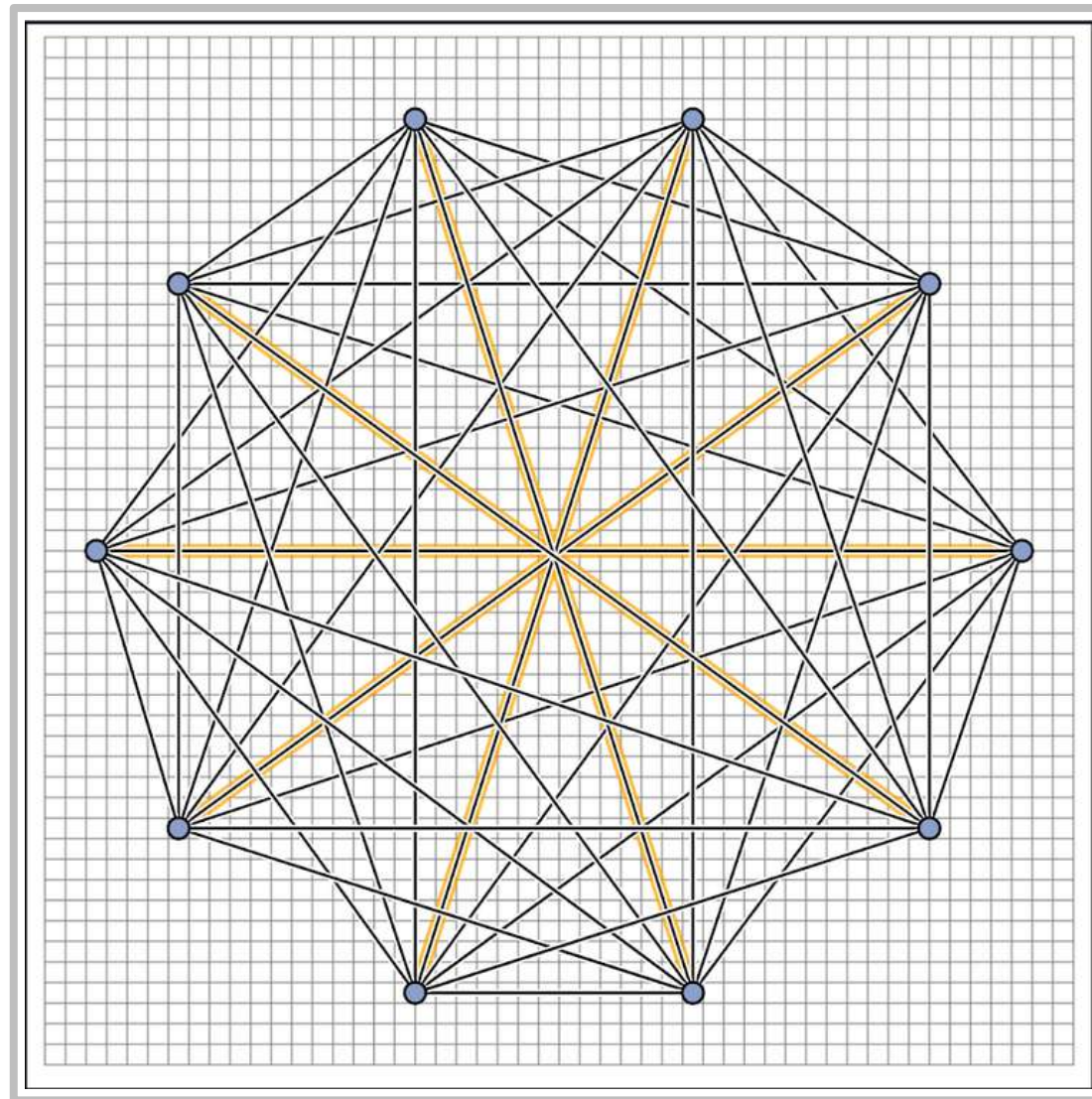
graph **3**



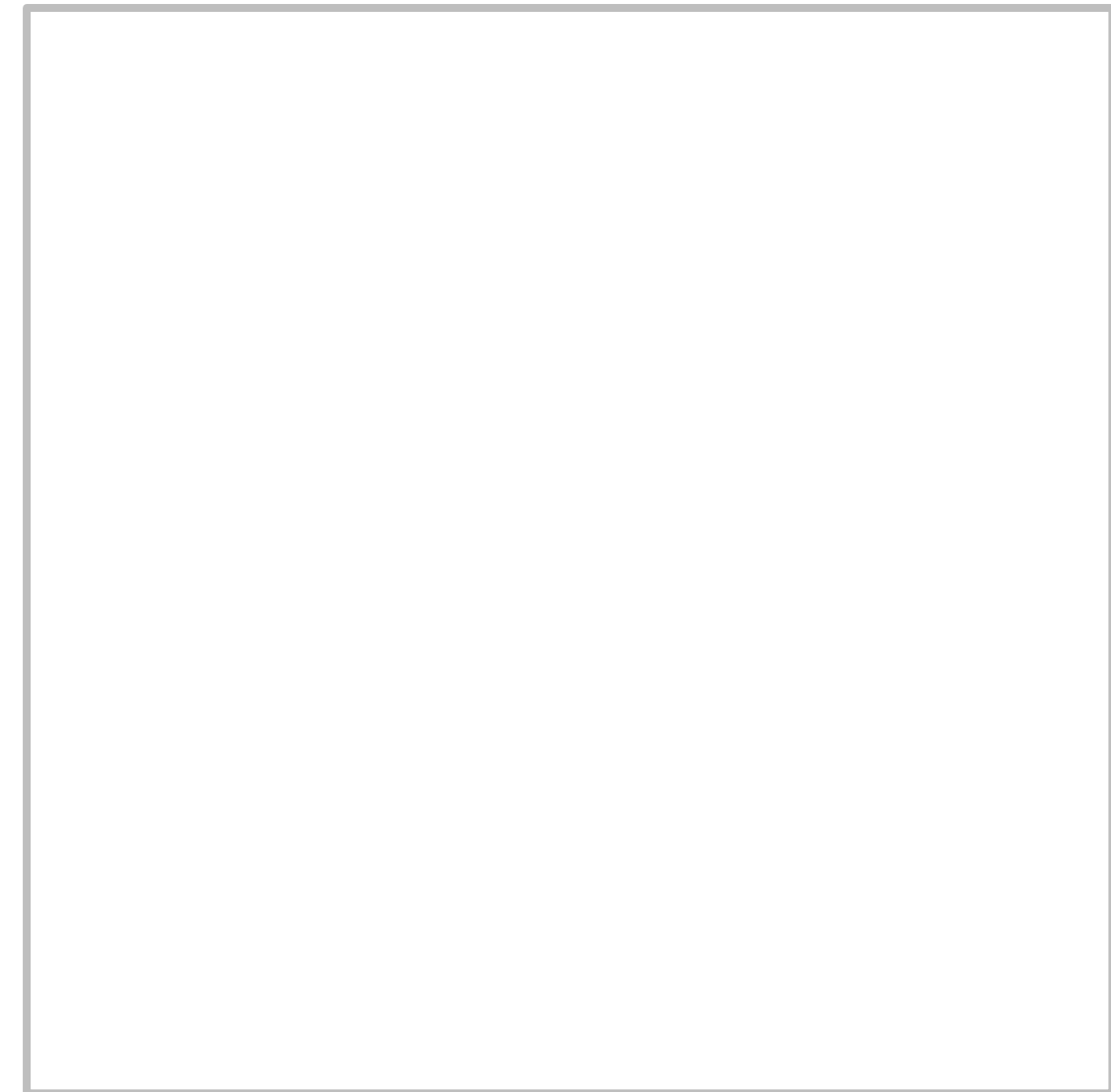
best manual
Bryony Miles
2-planar

LIVE CHALLENGE

Manual category graphs



input

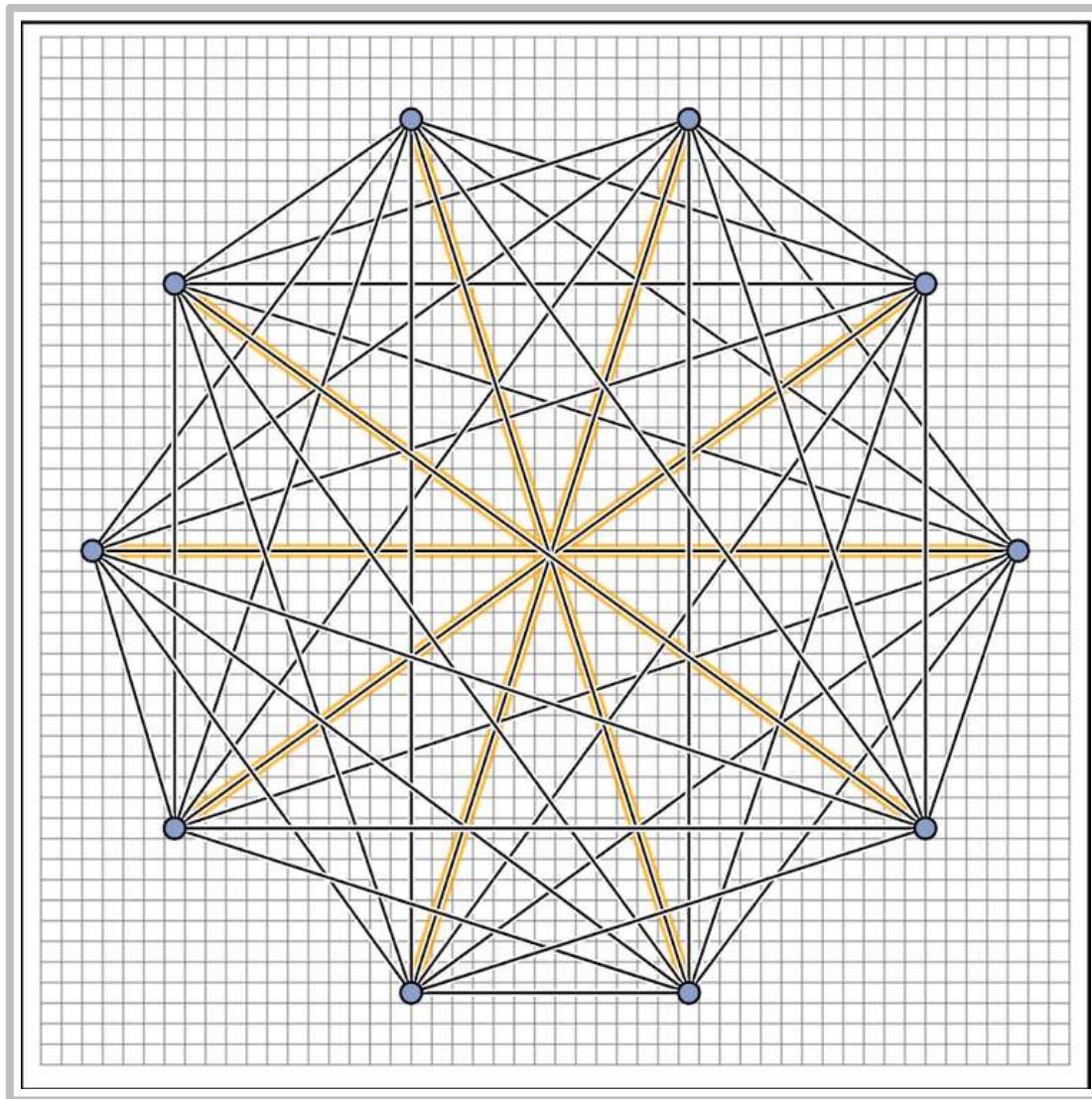


best manual

graph **4**

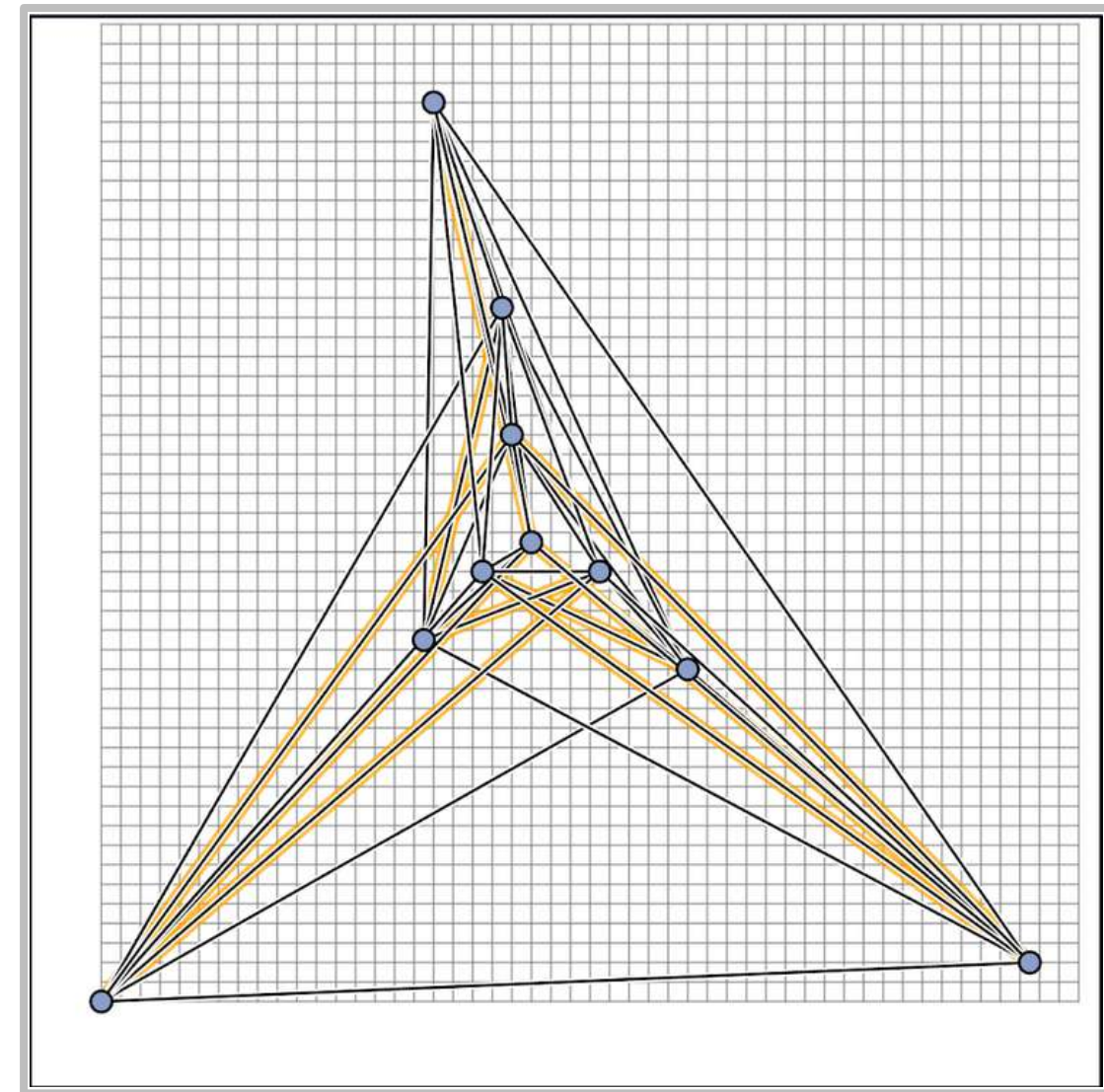
LIVE CHALLENGE

Manual category graphs



input

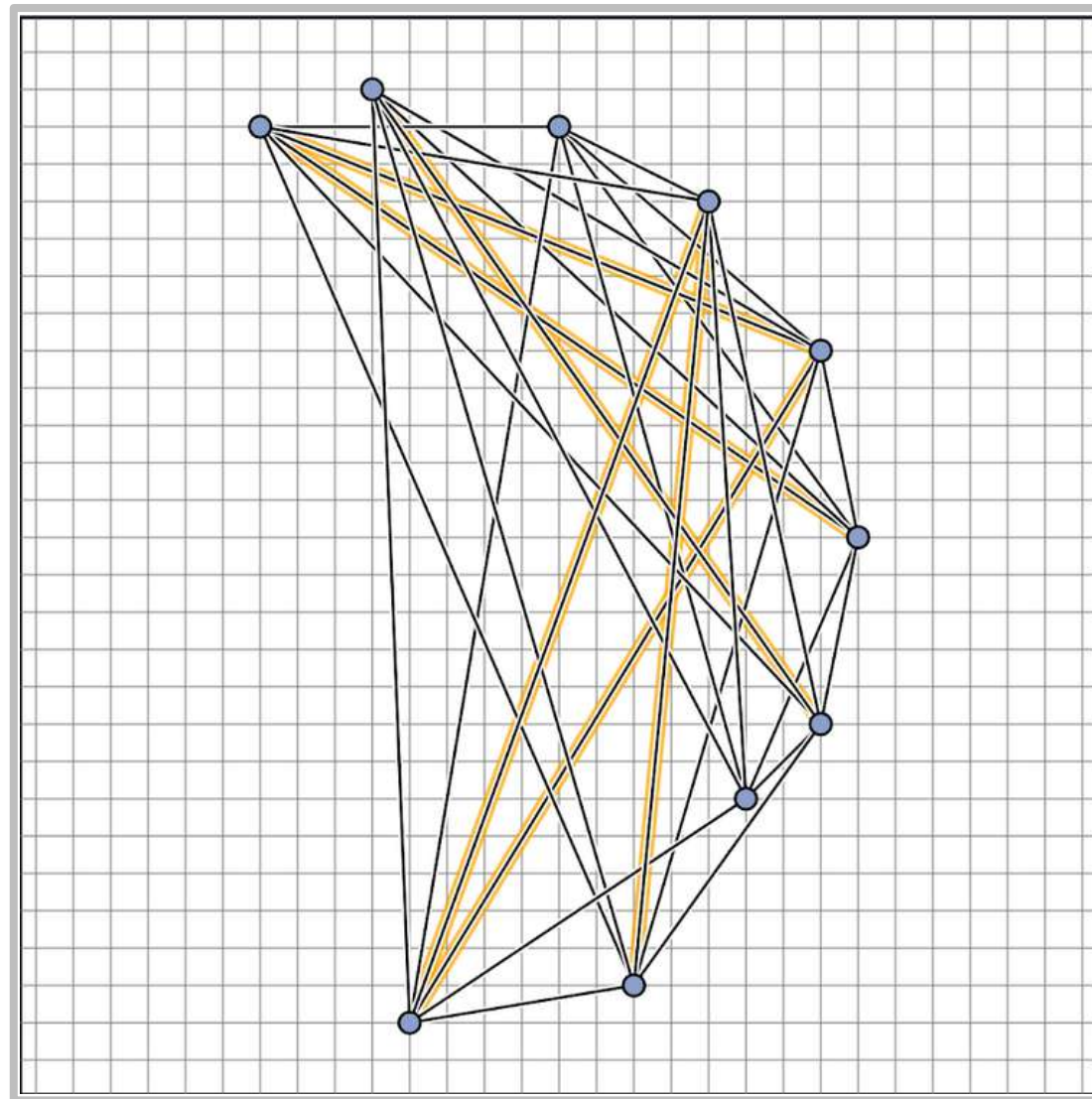
graph **4**



best manual
The Untanglers
5-planar

LIVE CHALLENGE

Manual category graphs



input

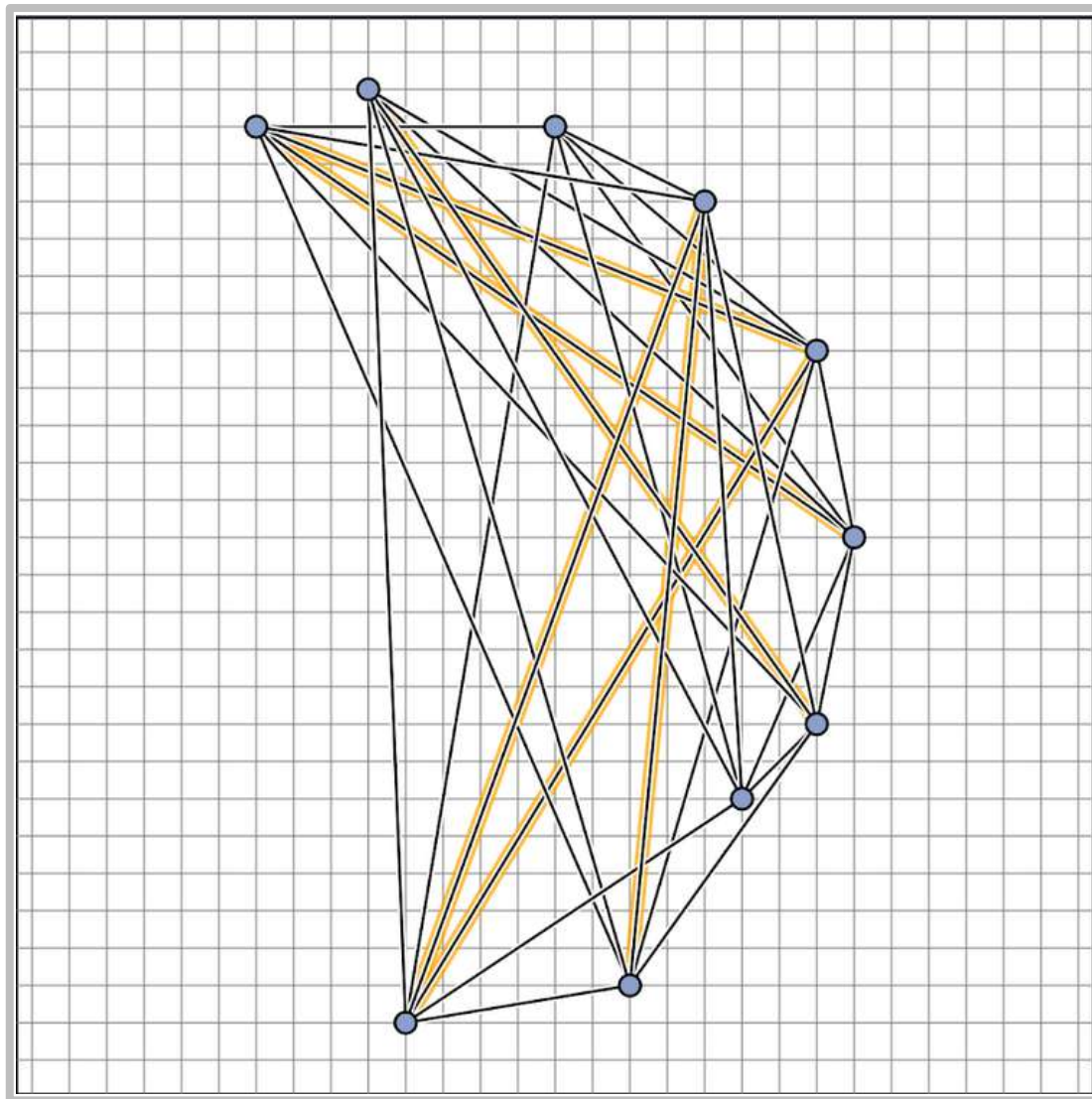
graph **5**



best manual

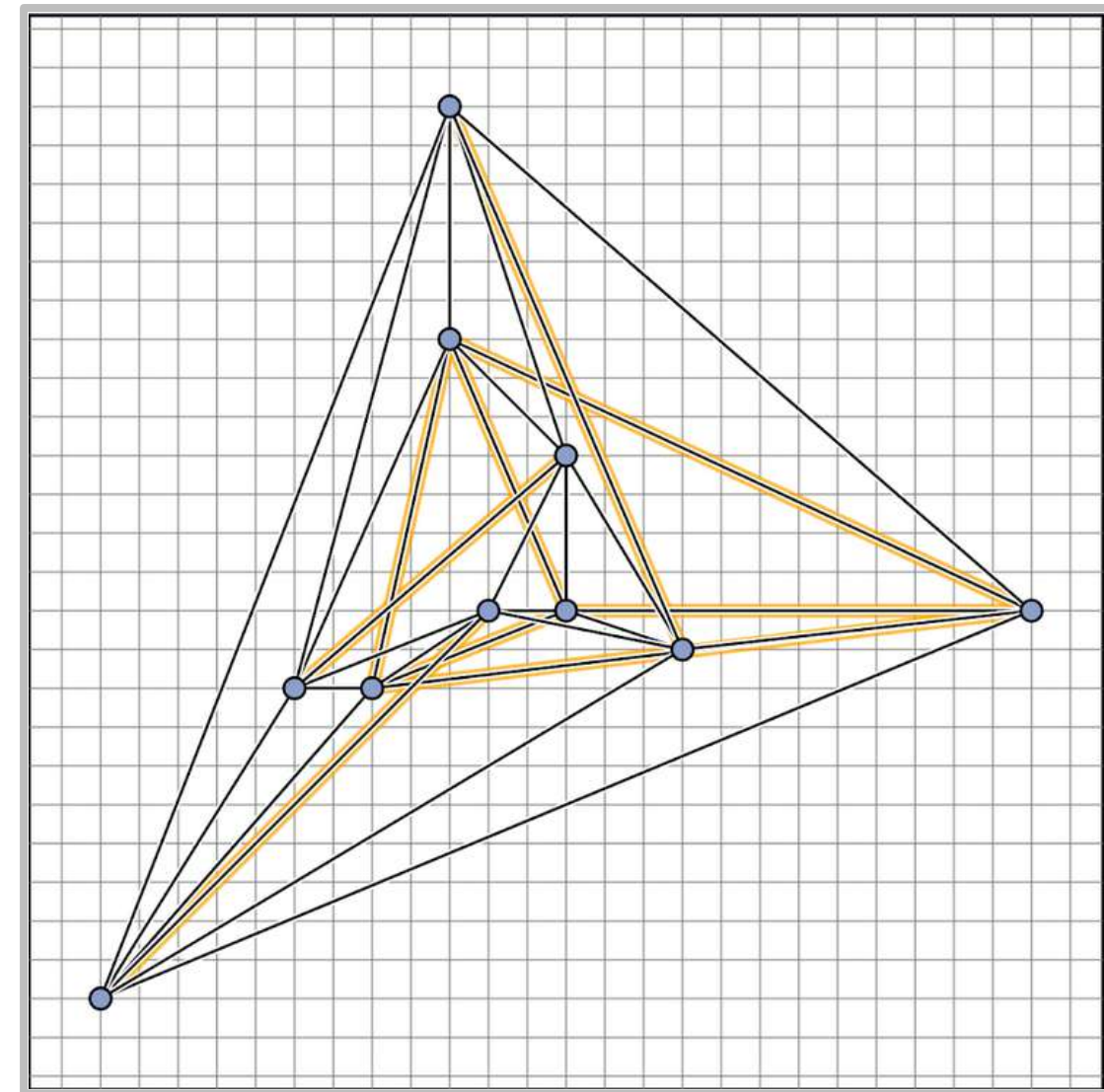
LIVE CHALLENGE

Manual category graphs



input

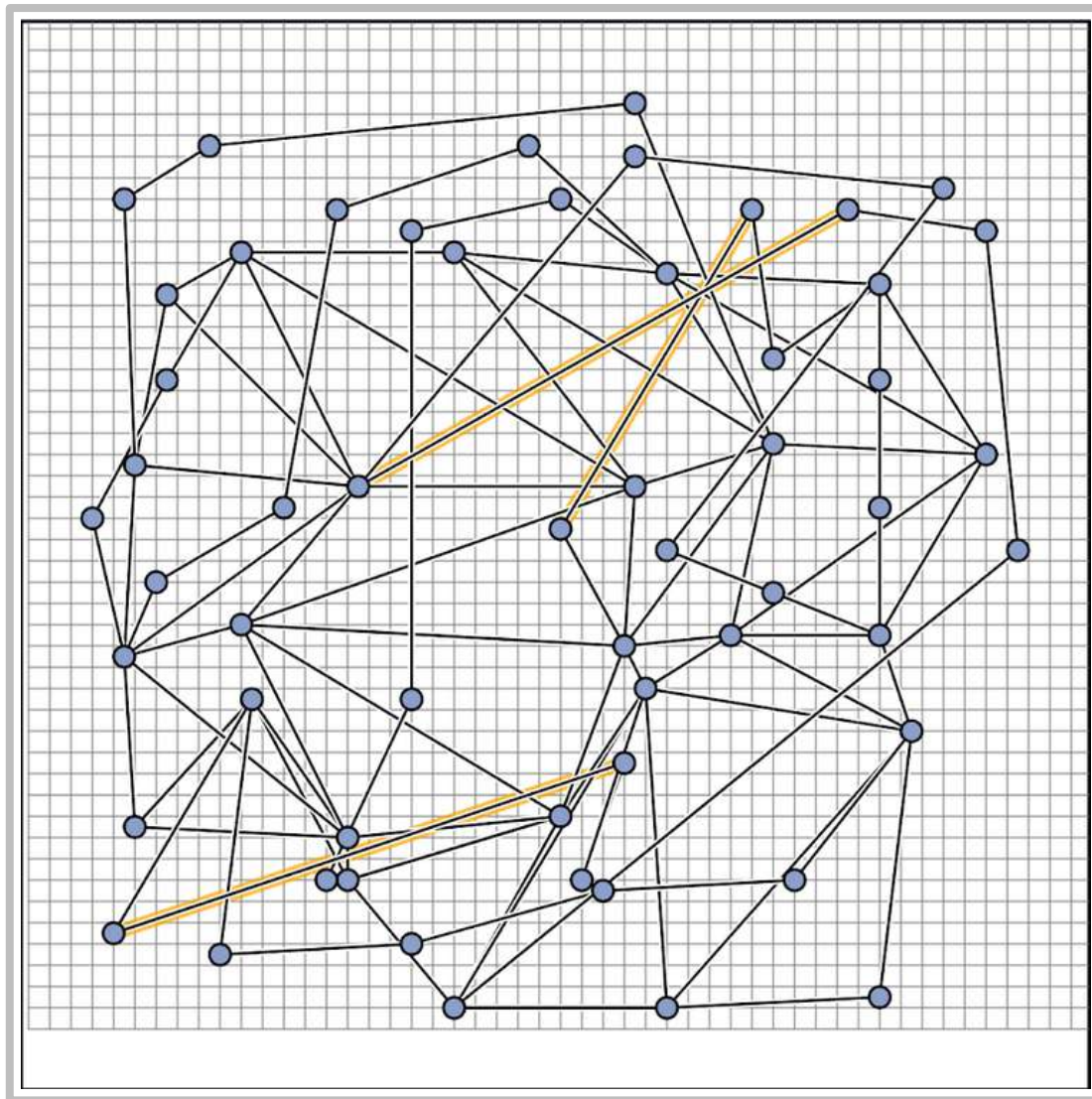
graph **5**



best manual
☐ id you fix encoding γ ?
2-planar

LIVE CHALLENGE

Manual category graphs



input

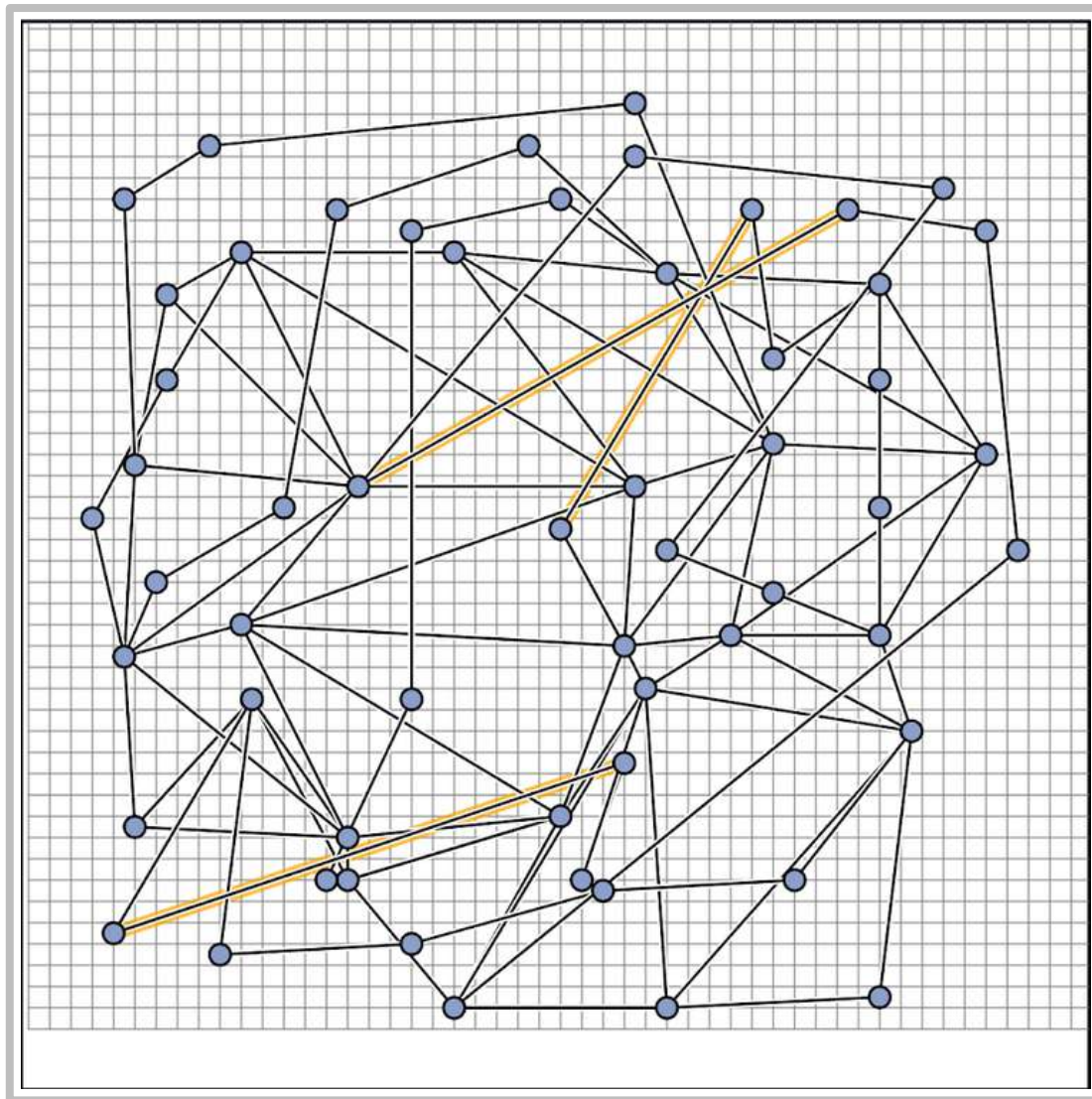


best manual

graph **6**

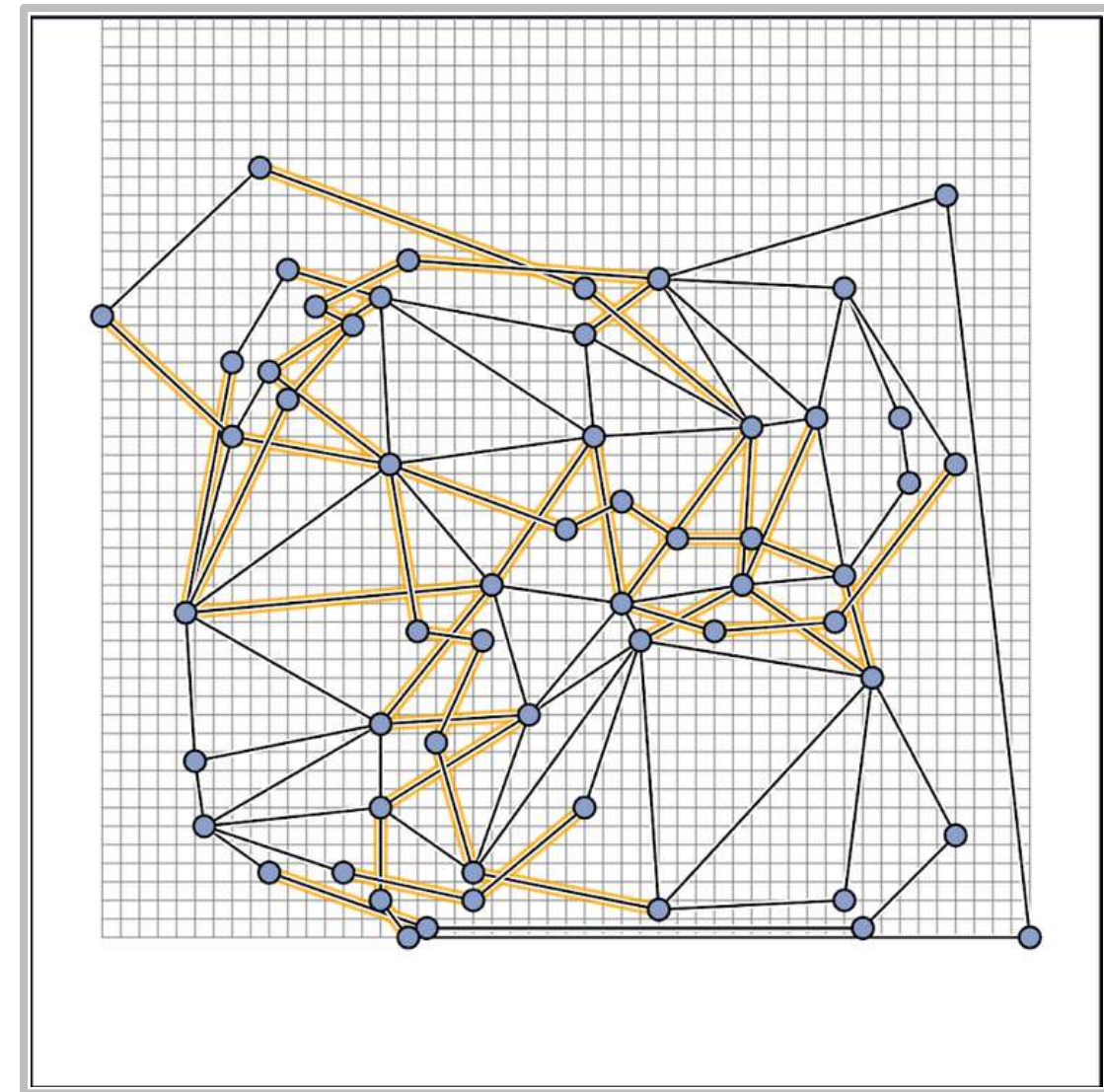
LIVE CHALLENGE

Manual category graphs



input

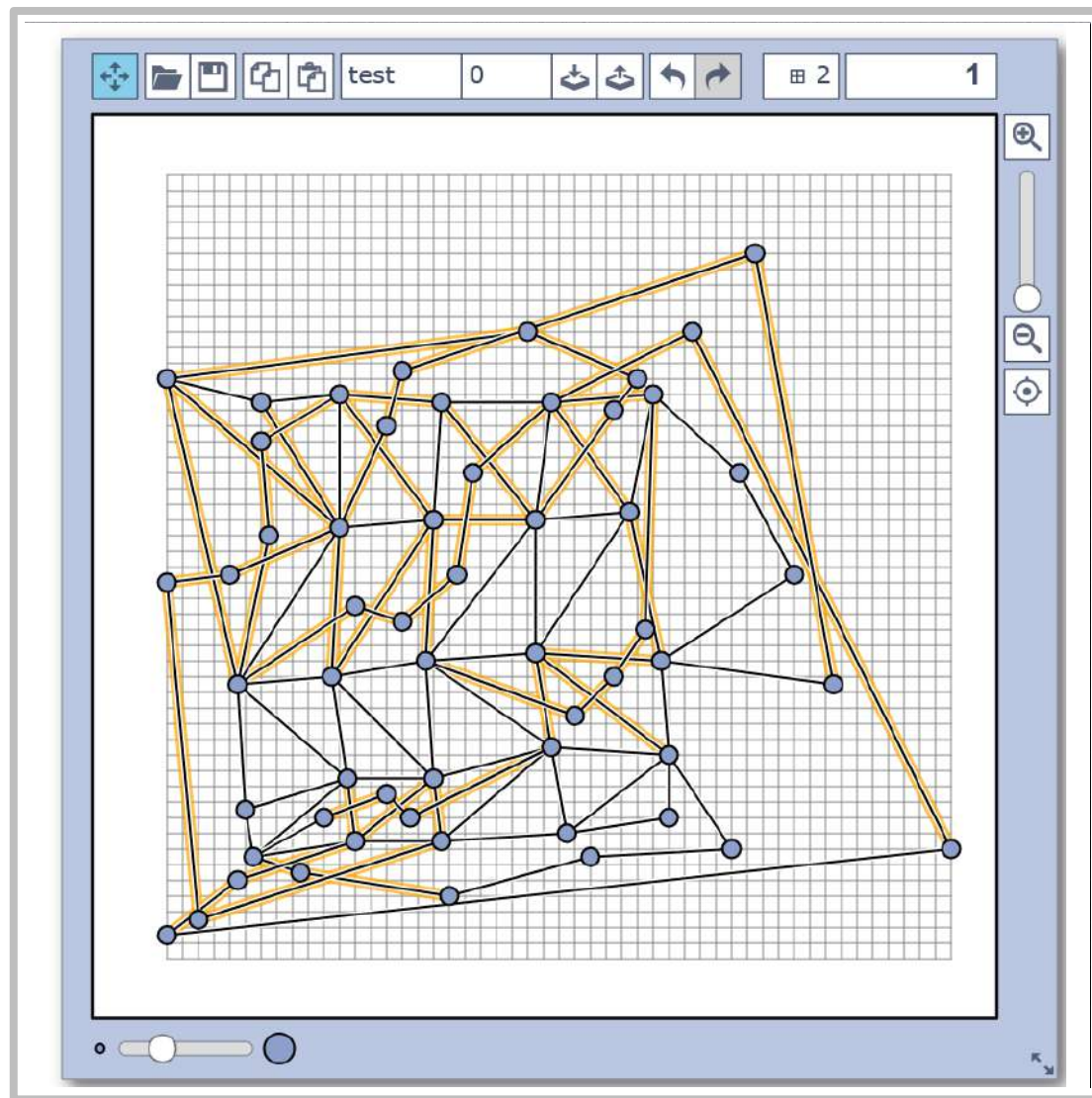
graph 6



best manual
Spider-Barbies
1-planar

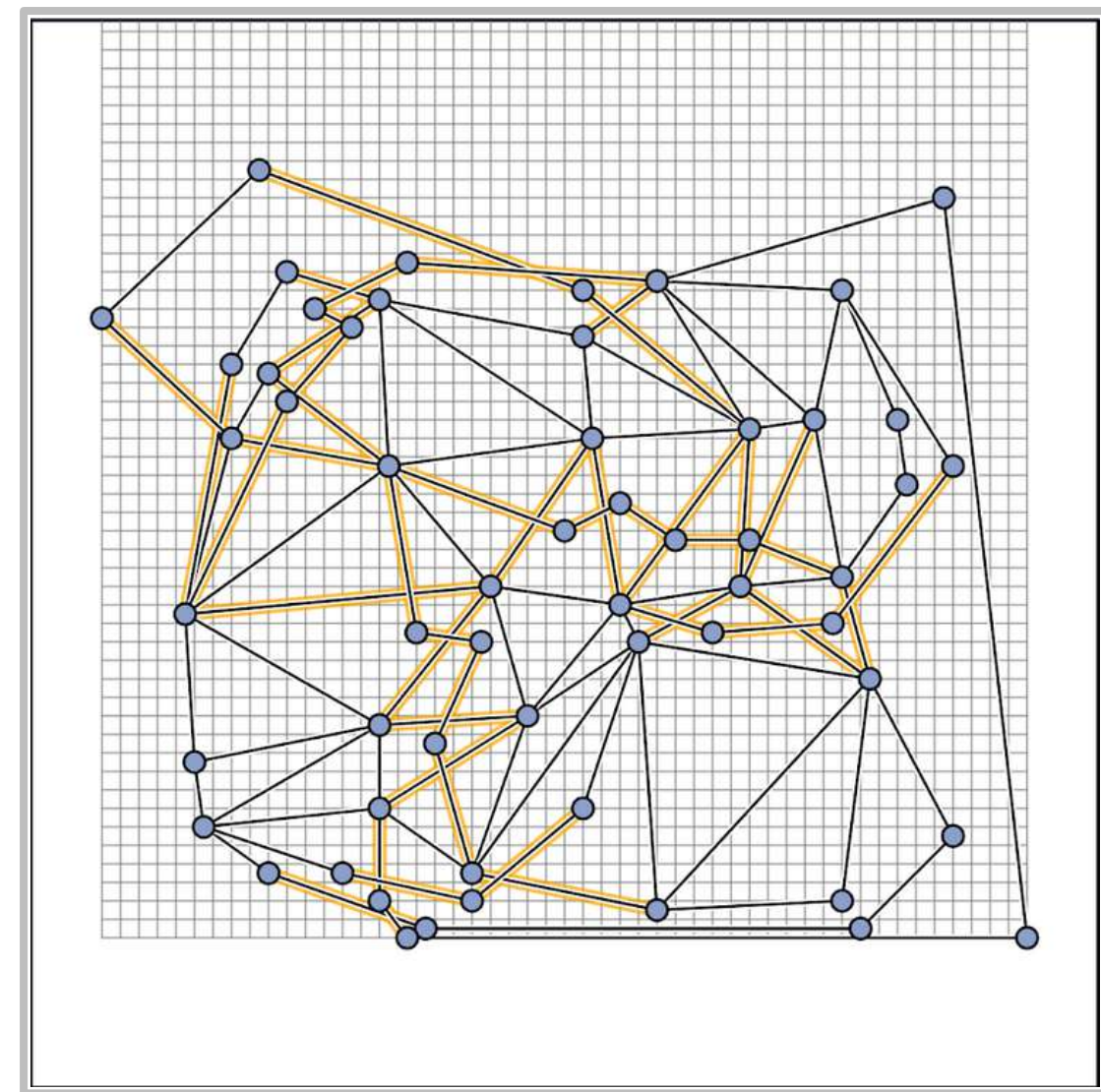
LIVE CHALLENGE

Manual category graphs



Jules

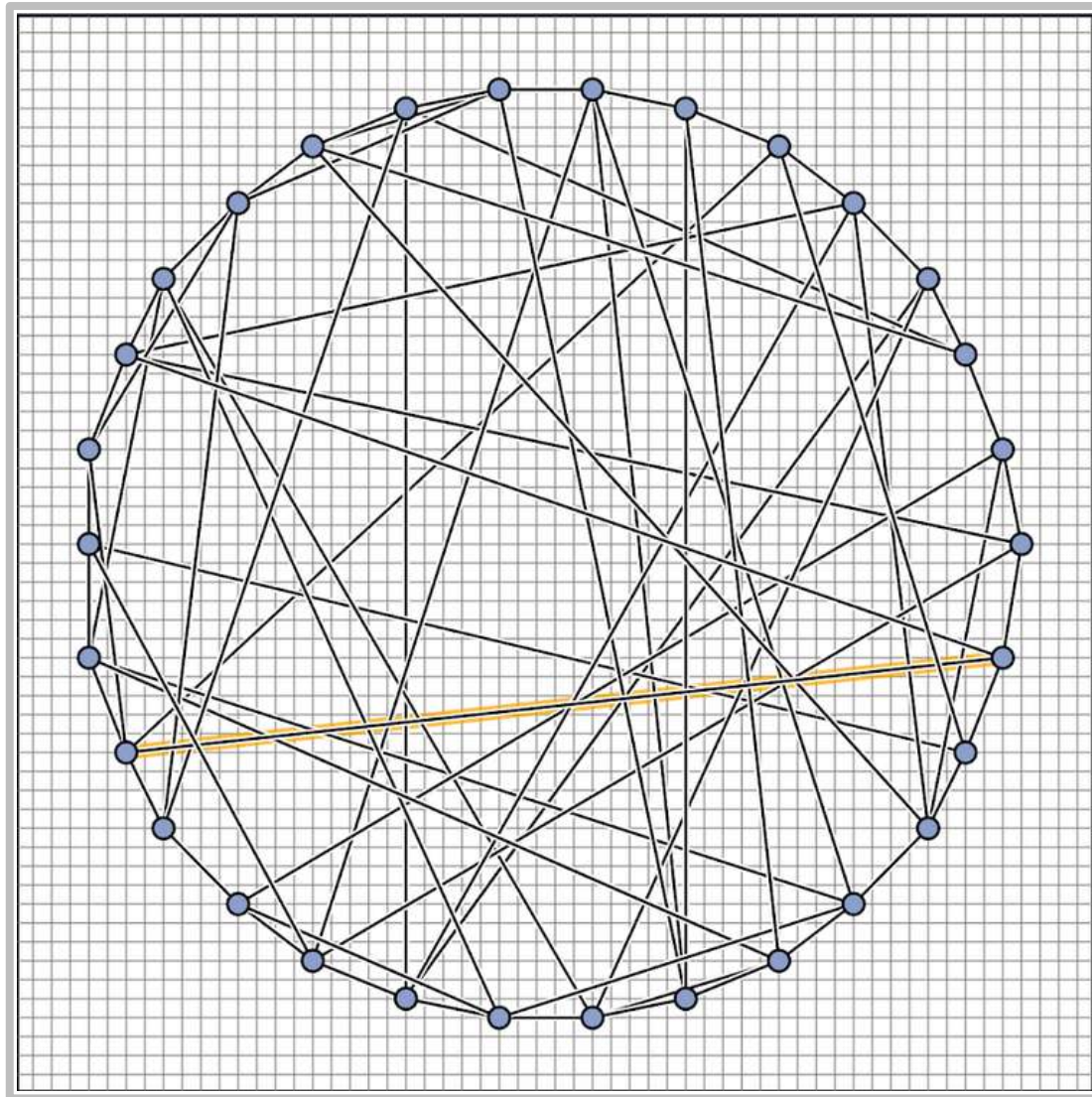
graph 6



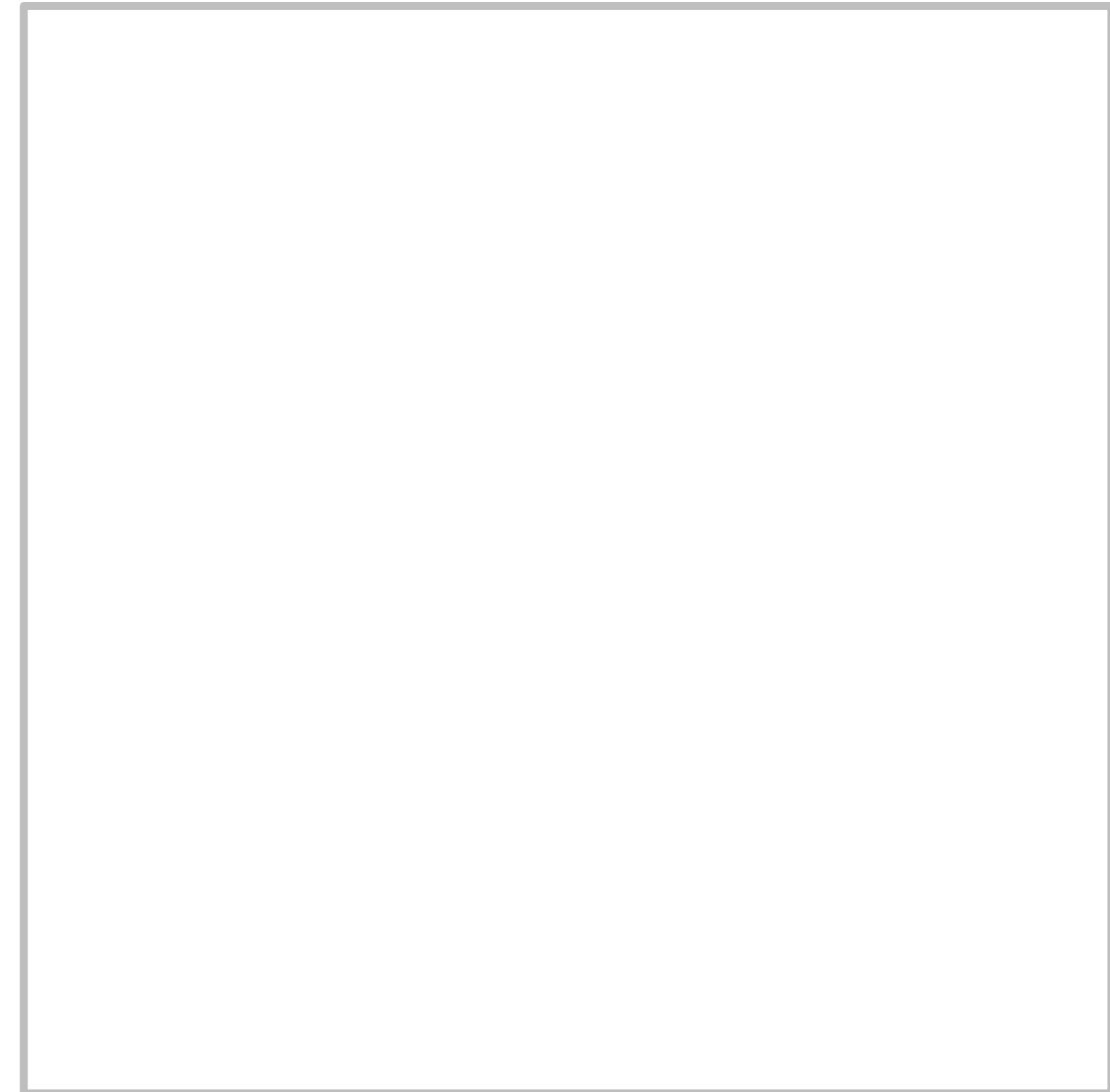
best manual
Spider-Barbies
1-planar

LIVE CHALLENGE

Manual category graphs



input

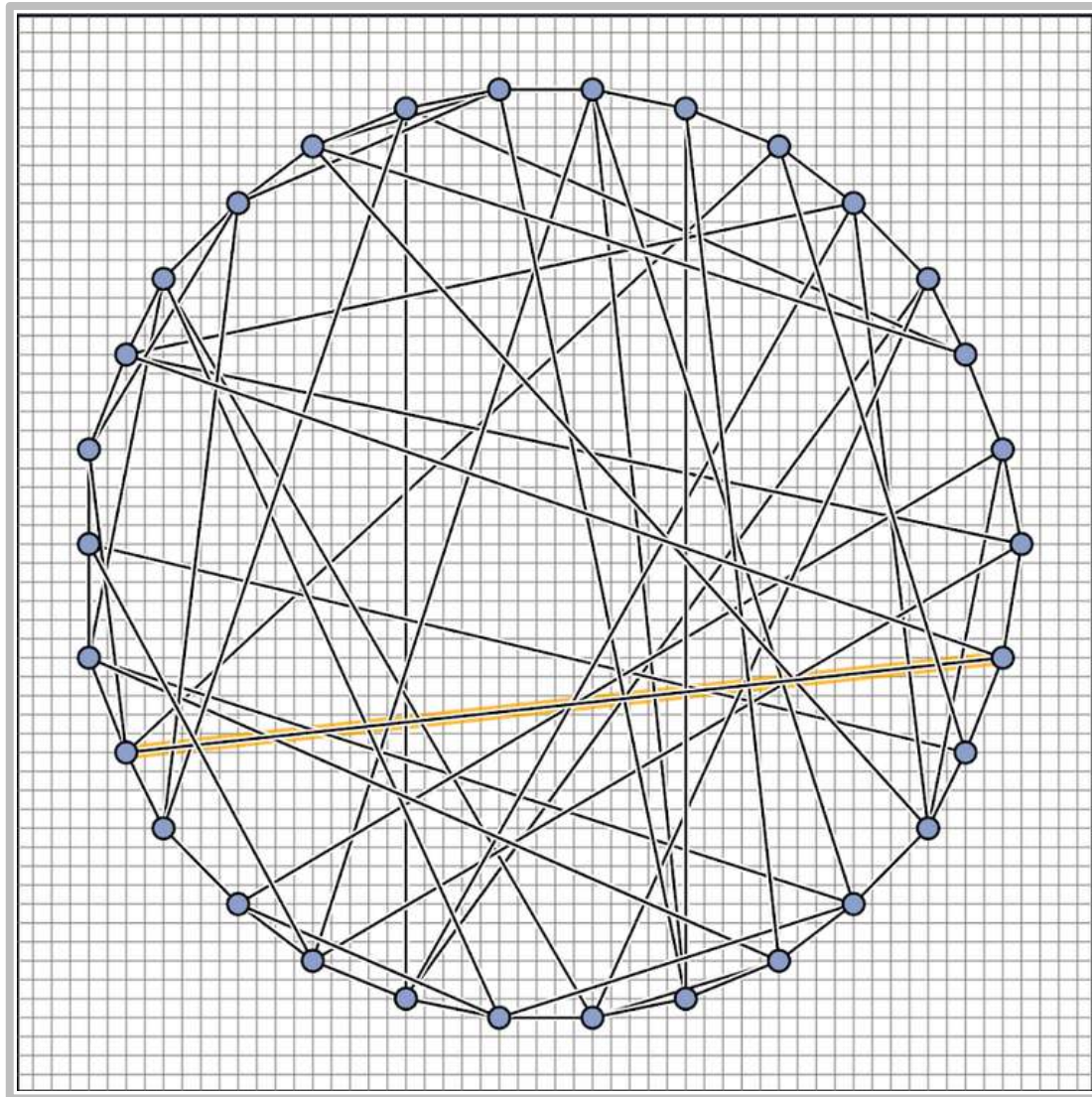


best manual

graph **7**

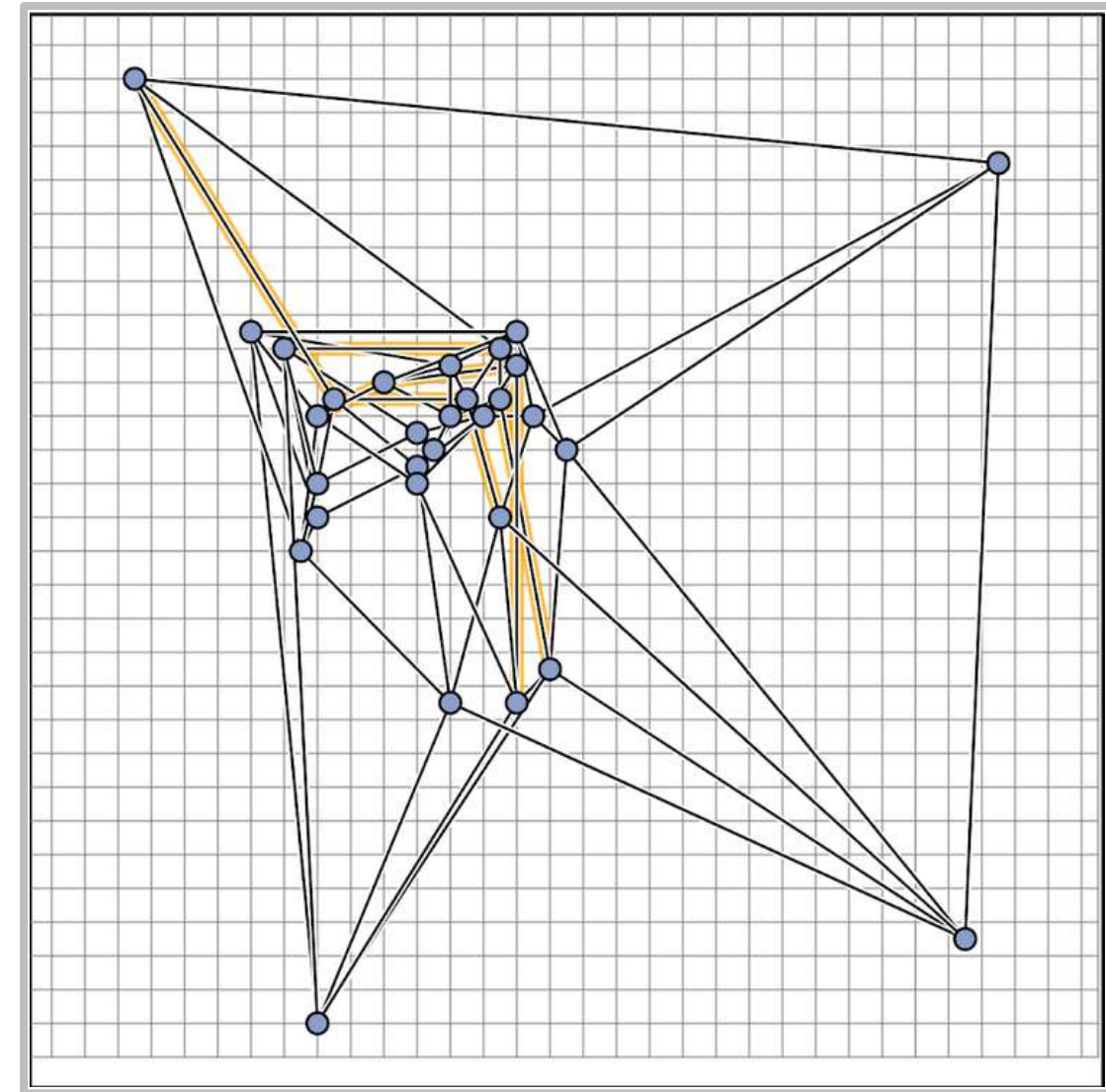
LIVE CHALLENGE

Manual category graphs



input

graph **7**



best manual
Spider-Barbies
4-planar

LIVE CHALLENGE

Manual category results

LIVE CHALLENGE

Manual category results

The Scores in Category Manual

The contest will end in 14 minutes, and 35 seconds!

Live Standings

PLACE	TEAM	SCORE
1	The Untanglers	6.692348783694937
2	Power Graph Girls	6.332784155328798
3	Simple Straight-Line Controversy	6.232424618131566
4	94.3333-planar	6.16533994094215
5	Did you fix your Encodiny?	6.113204299752599
6	disaro	6.103546475838719
7	Spider-Barbies	6.073542928200692
8	Tasmanian Devils	5.8621329321174835
9	YouShallNotCross!	5.478465690553289
10	notadmin	5.369143368131566
11	Platypus	5.256454656220209
12	TUW-Team-2	4.995268639137115
13	hot potato	4.281209327912625
14	Bryony Miles	1.765625

LIVE CHALLENGE

Manual category results

graph

The Untanglers
Spider-Barbies
notadmin
Bryony Miles
Tasmanian Devils
hot potato
disaro
94.3333-planar
TUW-Team-2
Platypus
Simple Straight-Line Controversy
?id you fix your Encodin??
Power Graph Girls
YouShallNotCross!

LIVE CHALLENGE

Manual category results

graph 1

The Untanglers	1.0
Spider-Barbies	1.0
notadmin	1.0
Bryony Miles	1.0
Tasmanian Devils	1.0
hot potato	1.0
disaro	1.0
94.3333-planar	1.0
TUW-Team-2	1.0
Platypus	1.0
Simple Straight-Line Controversy	1.0
?id you fix your Encodin??	1.0
Power Graph Girls	1.0
YouShallNotCross!	1.0

LIVE CHALLENGE

Manual category results

graph	1	2
The Untanglers	1.0	4.0
Spider-Barbies	1.0	4.0
notadmin	1.0	6.0
Bryony Miles	1.0	6.0
Tasmanian Devils	1.0	4.0
hot potato	1.0	4.0
disaro	1.0	4.0
94.3333-planar	1.0	4.0
TUW-Team-2	1.0	11.0
Platypus	1.0	9.0
Simple Straight-Line Controversy	1.0	4.0
?id you fix your Encodin??	1.0	4.0
Power Graph Girls	1.0	4.0
YouShallNotCross!	1.0	5.0

LIVE CHALLENGE

Manual category results

graph	1	2	3
The Untanglers	1.0	4.0	2.0
Spider-Barbies	1.0	4.0	2.0
notadmin	1.0	6.0	2.0
Bryony Miles	1.0	6.0	2.0
Tasmanian Devils	1.0	4.0	2.0
hot potato	1.0	4.0	3.0
disaro	1.0	4.0	2.0
94.3333-planar	1.0	4.0	2.0
TUW-Team-2	1.0	11.0	3.0
Platypus	1.0	9.0	2.0
Simple Straight-Line Controversy	1.0	4.0	2.0
?id you fix your Encodin??	1.0	4.0	2.0
Power Graph Girls	1.0	4.0	2.0
YouShallNotCross!	1.0	5.0	2.0

LIVE CHALLENGE

Manual category results

graph	1	2	3	4
The Untanglers	1.0	4.0	2.0	5.0
Spider-Barbies	1.0	4.0	2.0	6.0
notadmin	1.0	6.0	2.0	7.0
Bryony Miles	1.0	6.0	2.0	8.0
Tasmanian Devils	1.0	4.0	2.0	5.0
hot potato	1.0	4.0	3.0	6.0
disaro	1.0	4.0	2.0	5.0
94.3333-planar	1.0	4.0	2.0	7.0
TUW-Team-2	1.0	11.0	3.0	10.0
Platypus	1.0	9.0	2.0	7.0
Simple Straight-Line Controversy	1.0	4.0	2.0	6.0
?id you fix your Encodin??	1.0	4.0	2.0	6.0
Power Graph Girls	1.0	4.0	2.0	6.0
YouShallNotCross!	1.0	5.0	2.0	7.0

LIVE CHALLENGE

Manual category results

graph	1	2	3	4	5
The Untanglers	1.0	4.0	2.0	5.0	2.0
Spider-Barbies	1.0	4.0	2.0	6.0	2.0
notadmin	1.0	6.0	2.0	7.0	4.0
Bryony Miles	1.0	6.0	2.0	8.0	5.0
Tasmanian Devils	1.0	4.0	2.0	5.0	3.0
hot potato	1.0	4.0	3.0	6.0	4.0
disaro	1.0	4.0	2.0	5.0	3.0
94.3333-planar	1.0	4.0	2.0	7.0	3.0
TUW-Team-2	1.0	11.0	3.0	10.0	5.0
Platypus	1.0	9.0	2.0	7.0	3.0
Simple Straight-Line Controversy	1.0	4.0	2.0	6.0	4.0
?id you fix your Encodin??	1.0	4.0	2.0	6.0	2.0
Power Graph Girls	1.0	4.0	2.0	6.0	4.0
YouShallNotCross!	1.0	5.0	2.0	7.0	3.0

LIVE CHALLENGE

Manual category results

graph	1	2	3	4	5	6
The Untanglers	1.0	4.0	2.0	5.0	2.0	2.0
Spider-Barbies	1.0	4.0	2.0	6.0	2.0	1.0
notadmin	1.0	6.0	2.0	7.0	4.0	2.0
Bryony Miles	1.0	6.0	2.0	8.0	5.0	7.0
Tasmanian Devils	1.0	4.0	2.0	5.0	3.0	2.0
hot potato	1.0	4.0	3.0	6.0	4.0	5.0
disaro	1.0	4.0	2.0	5.0	3.0	2.0
94.3333-planar	1.0	4.0	2.0	7.0	3.0	2.0
TUW-Team-2	1.0	11.0	3.0	10.0	5.0	4.0
Platypus	1.0	9.0	2.0	7.0	3.0	2.0
Simple Straight-Line Controversy	1.0	4.0	2.0	6.0	4.0	2.0
?id you fix your Encodin??	1.0	4.0	2.0	6.0	2.0	2.0
Power Graph Girls	1.0	4.0	2.0	6.0	4.0	2.0
YouShallNotCross!	1.0	5.0	2.0	7.0	3.0	2.0

LIVE CHALLENGE

Manual category results

graph	1	2	3	4	5	6	7
The Untanglers	1.0	4.0	2.0	5.0	2.0	2.0	5.0
Spider-Barbies	1.0	4.0	2.0	6.0	2.0	1.0	4.0
notadmin	1.0	6.0	2.0	7.0	4.0	2.0	8.0
Bryony Miles	1.0	6.0	2.0	8.0	5.0	7.0	17.0
Tasmanian Devils	1.0	4.0	2.0	5.0	3.0	2.0	9.0
hot potato	1.0	4.0	3.0	6.0	4.0	5.0	9.0
disaro	1.0	4.0	2.0	5.0	3.0	2.0	9.0
94.3333-planar	1.0	4.0	2.0	7.0	3.0	2.0	6.0
TUW-Team-2	1.0	11.0	3.0	10.0	5.0	4.0	6.0
Platypus	1.0	9.0	2.0	7.0	3.0	2.0	14.0
Simple Straight-Line Controversy	1.0	4.0	2.0	6.0	4.0	2.0	6.0
?id you fix your Encodin??	1.0	4.0	2.0	6.0	2.0	2.0	6.0
Power Graph Girls	1.0	4.0	2.0	6.0	4.0	2.0	6.0
YouShallNotCross!	1.0	5.0	2.0	7.0	3.0	2.0	12.0

LIVE CHALLENGE

Manual category results

graph	1	2	3	4	5	6	7
The Untanglers	1.0	4.0	2.0	5.0	2.0	2.0	5.0
Spider-Barbies	1.0	4.0	2.0	6.0	2.0	1.0	4.0
notadmin	1.0	6.0	2.0	7.0	4.0	2.0	8.0
Bryony Miles	1.0	6.0	2.0	8.0	5.0	7.0	17.0
 Soeren Terziadis & Birgit Vogtenhuber ☐ <i>id you fix your Encodin_γ?</i>							
IUV-team-2	1.0	11.0	3.0	10.0	5.0	4.0	6.0
Platypus	1.0	9.0	2.0	7.0	3.0	2.0	14.0
Simple Straight-Line Controversy	1.0	4.0	2.0	6.0	4.0	2.0	6.0
?id you fix your Encodin??	1.0	4.0	2.0	6.0	2.0	2.0	6.0
Power Graph Girls	1.0	4.0	2.0	6.0	4.0	2.0	6.0
YouShallNotCross!	1.0	5.0	2.0	7.0	3.0	2.0	12.0

LIVE CHALLENGE

Manual category results

graph	1	2	3	4	5	6	7
The Untanglers	1.0	4.0	2.0	5.0	2.0	2.0	5.0
Spider-Barbies	1.0	4.0	2.0	6.0	2.0	1.0	4.0
notadmin	1.0	6.0	2.0	7.0	4.0	2.0	8.0
Brvonv Miles	1.0	6.0	2.0	8.0	5.0	7.0	17.0
 Joseph Dorfer, Ly Orgo, & Benedikt Hahn <i>The Untanglers</i>							
TUW-Team-2	1.0	11.0	3.0	10.0	5.0	4.0	6.0
Platypus	1.0	9.0	2.0	7.0	3.0	2.0	14.0
Simple Straight-Line Controversy	1.0	4.0	2.0	6.0	4.0	2.0	6.0
?id you fix your Encodin??	1.0	4.0	2.0	6.0	2.0	2.0	6.0
Power Graph Girls	1.0	4.0	2.0	6.0	4.0	2.0	6.0
YouShallNotCross!	1.0	5.0	2.0	7.0	3.0	2.0	12.0

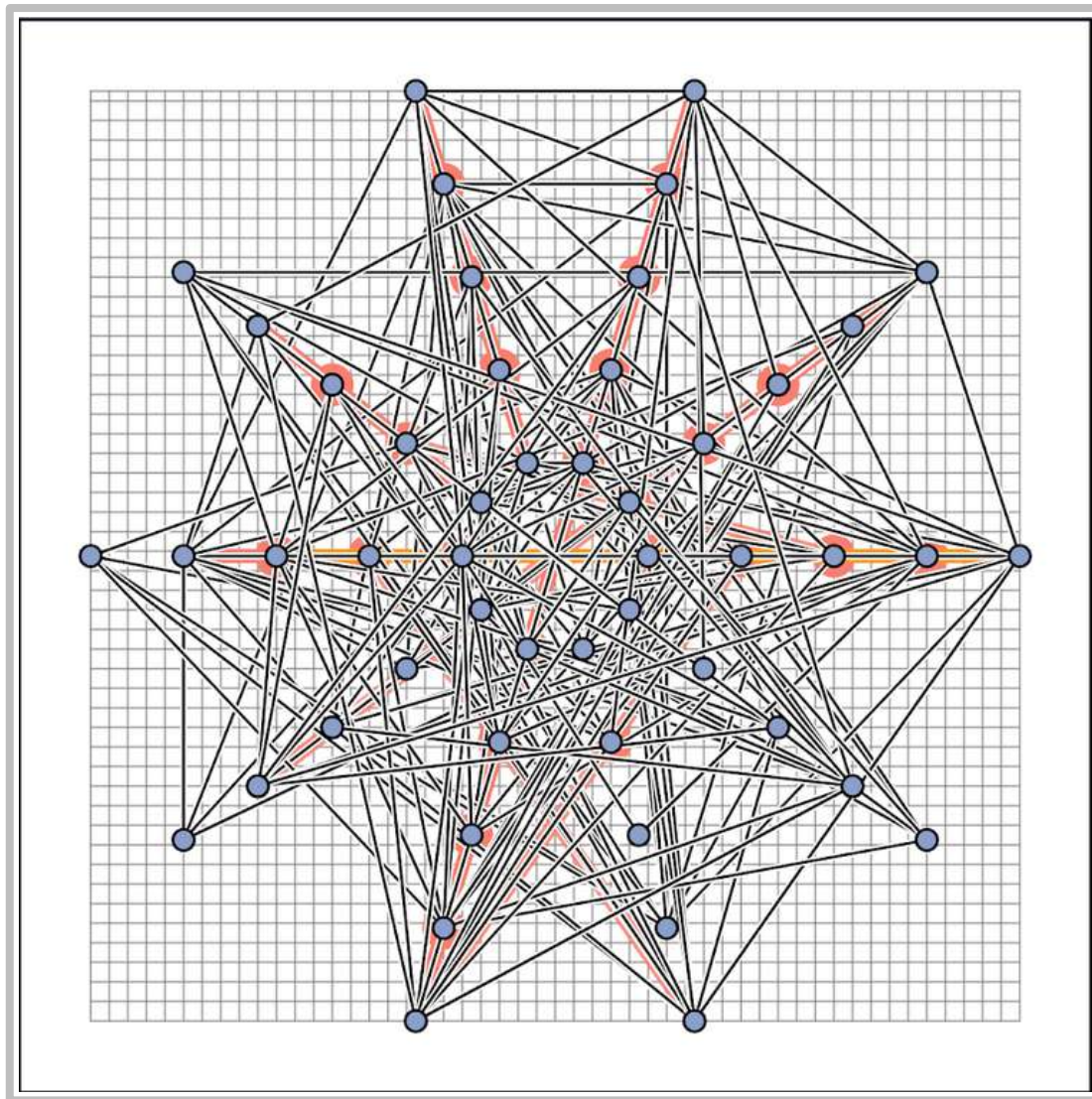
LIVE CHALLENGE

Manual category results

graph	1	2	3	4	5	6	7
The Untanglers	1.0	4.0	2.0	5.0	2.0	2.0	5.0
Spider-Barbies	1.0	4.0	2.0	6.0	2.0	1.0	4.0
notadmin	1.0	6.0	2.0	7.0	4.0	2.0	8.0
 Giordano Andreolna, Philipp Kindermann, & Allegra Strippoli  Spider-Barbies							
94.5555-planar	1.0	4.0	2.0	7.0	3.0	2.0	6.0
TUW-Team-2	1.0	11.0	3.0	10.0	5.0	4.0	6.0
Platypus	1.0	9.0	2.0	7.0	3.0	2.0	14.0
Simple Straight-Line Controversy	1.0	4.0	2.0	6.0	4.0	2.0	6.0
?id you fix your Encodin??	1.0	4.0	2.0	6.0	2.0	2.0	6.0
Power Graph Girls	1.0	4.0	2.0	6.0	4.0	2.0	6.0
YouShallNotCross!	1.0	5.0	2.0	7.0	3.0	2.0	12.0

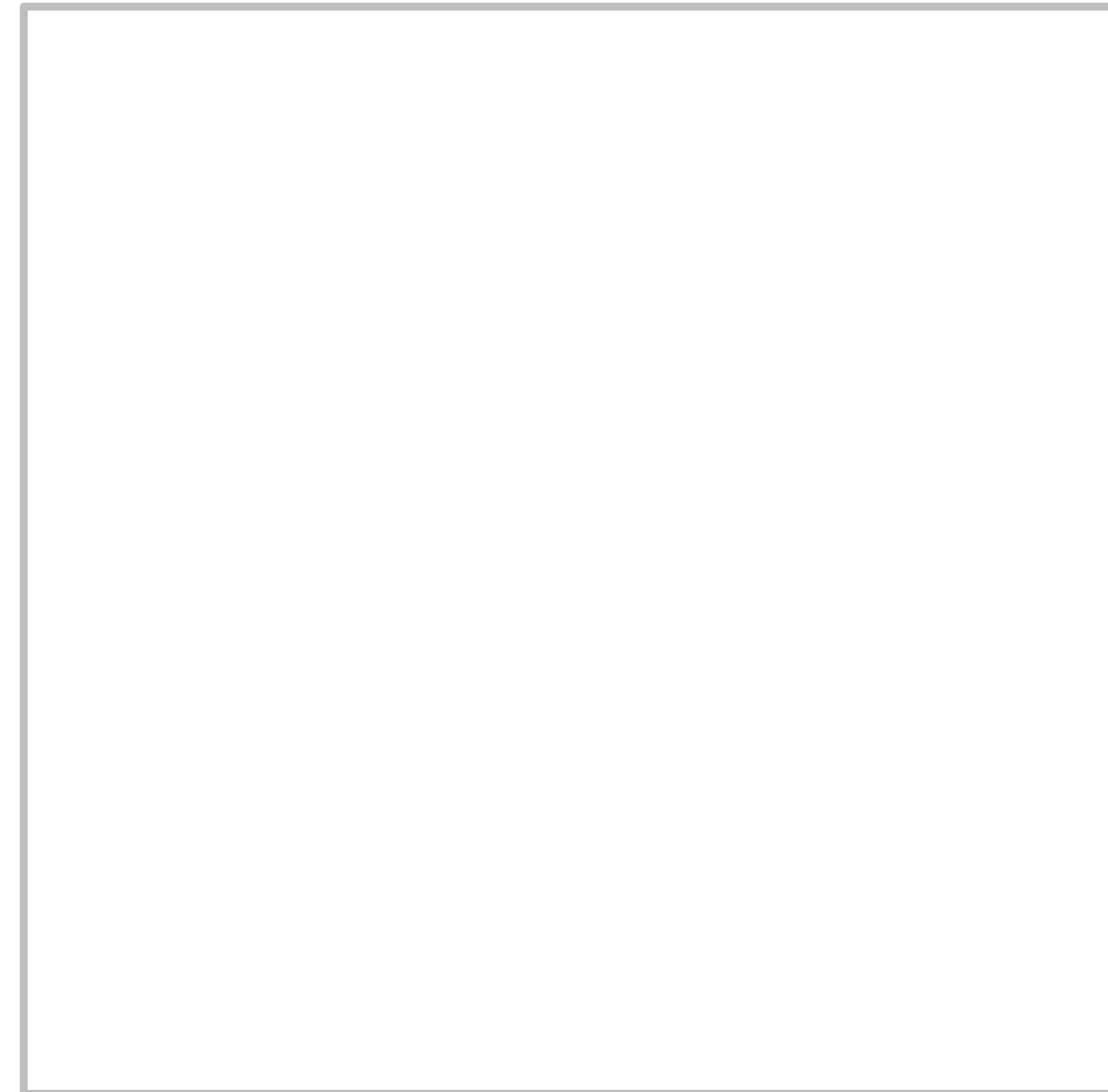
LIVE CHALLENGE

Automatic category graphs



input

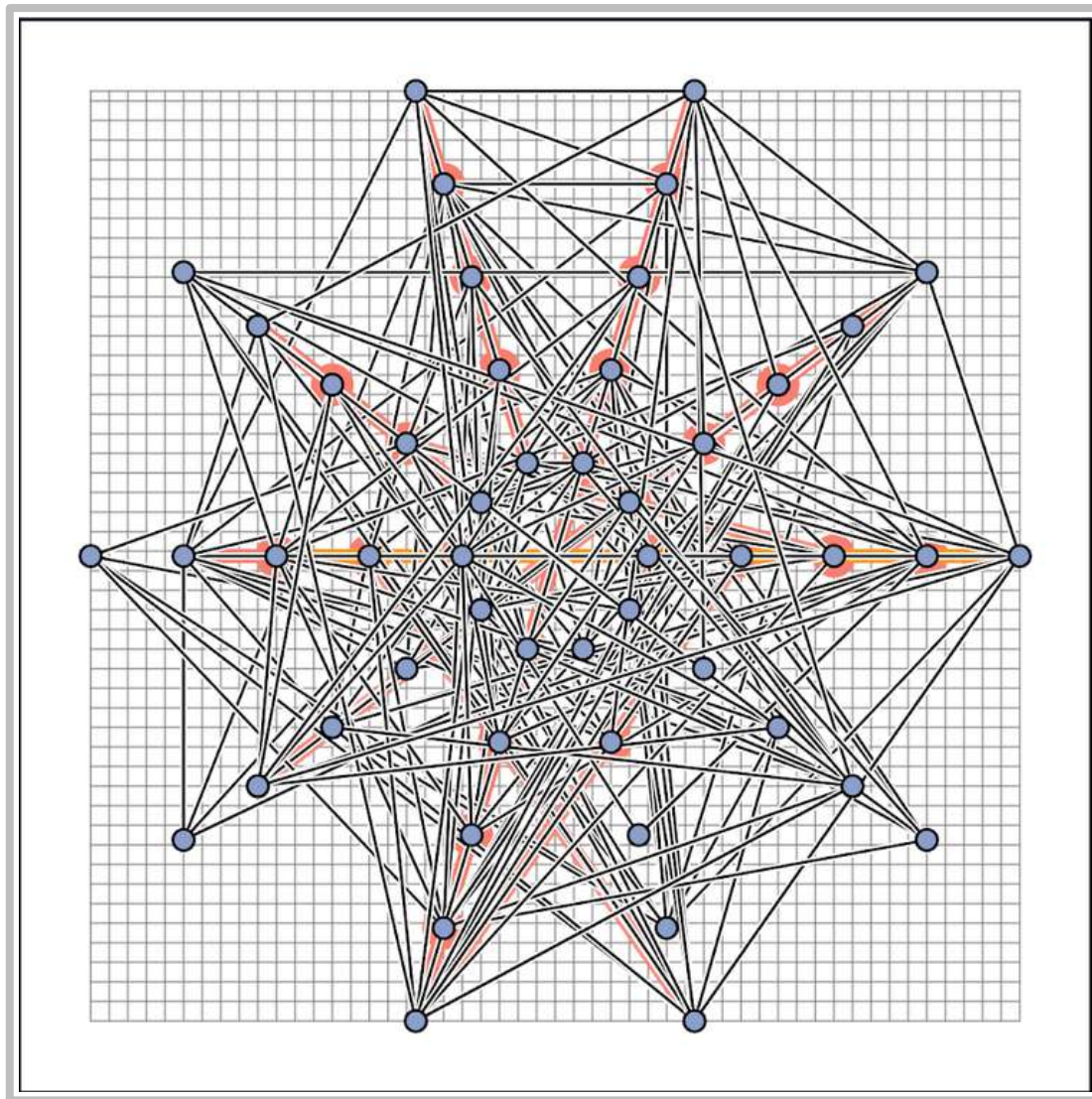
graph 1



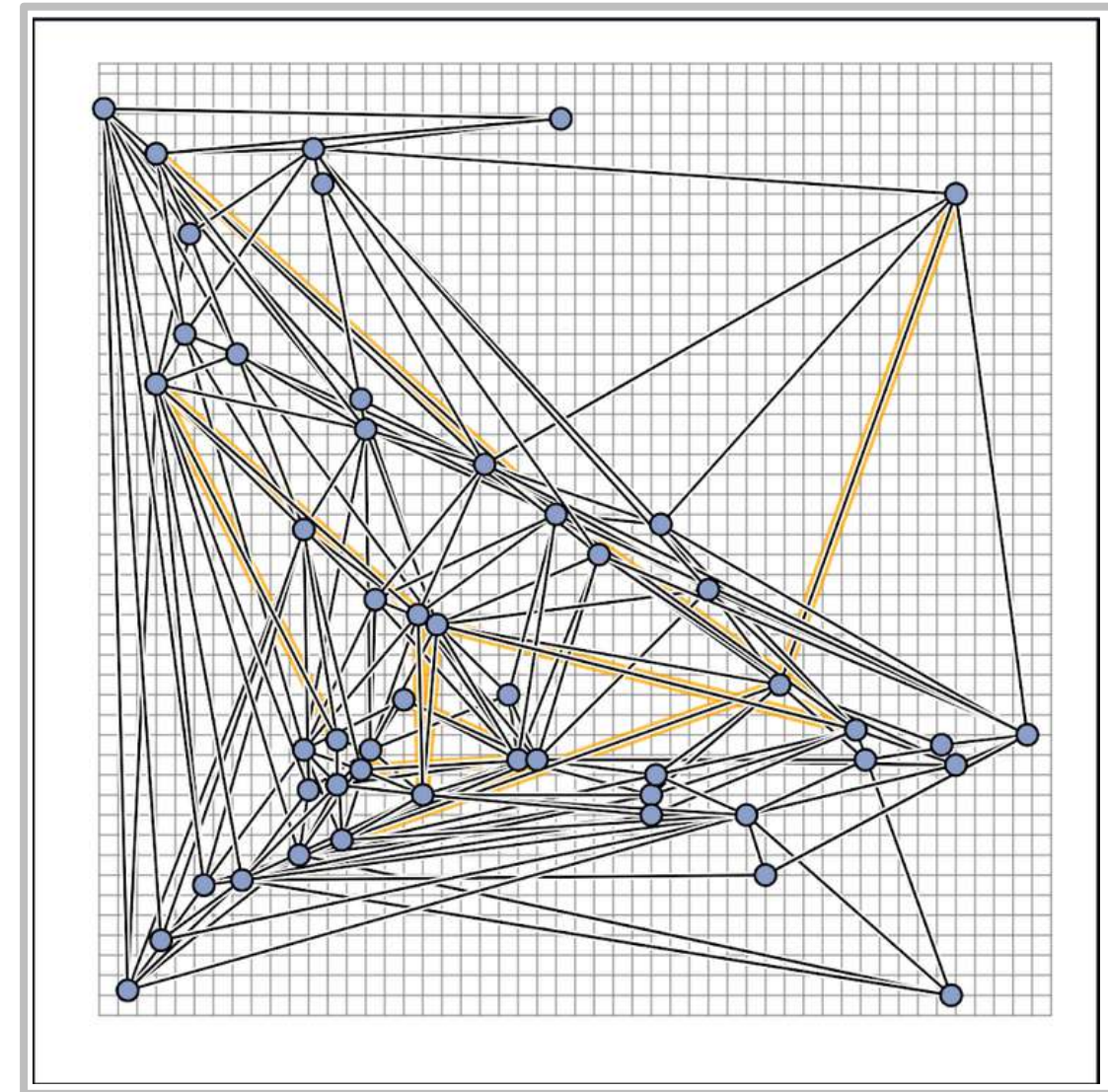
best automatic

LIVE CHALLENGE

Automatic category graphs



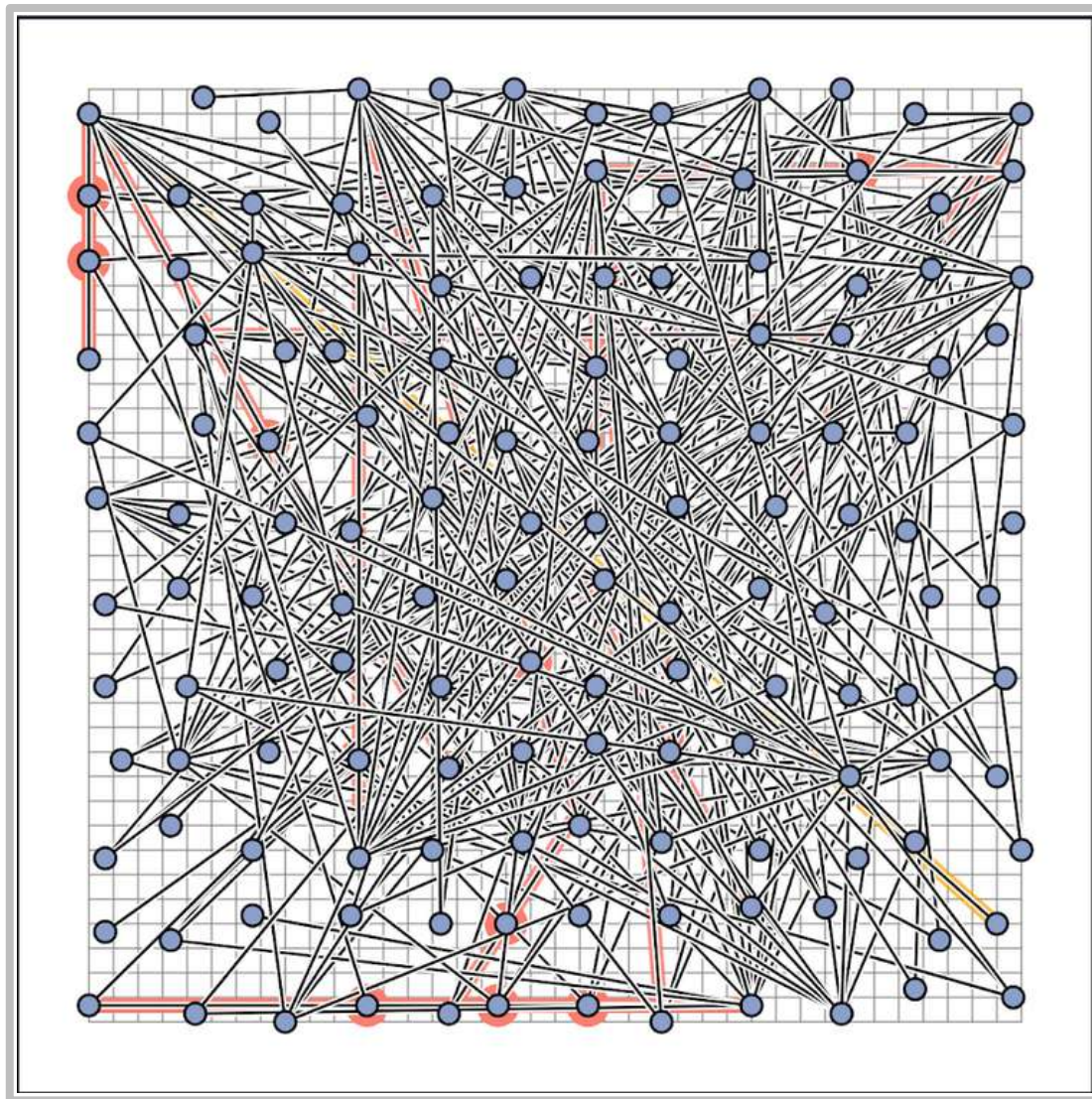
input
graph 1



best automatic
randomteam
9-planar

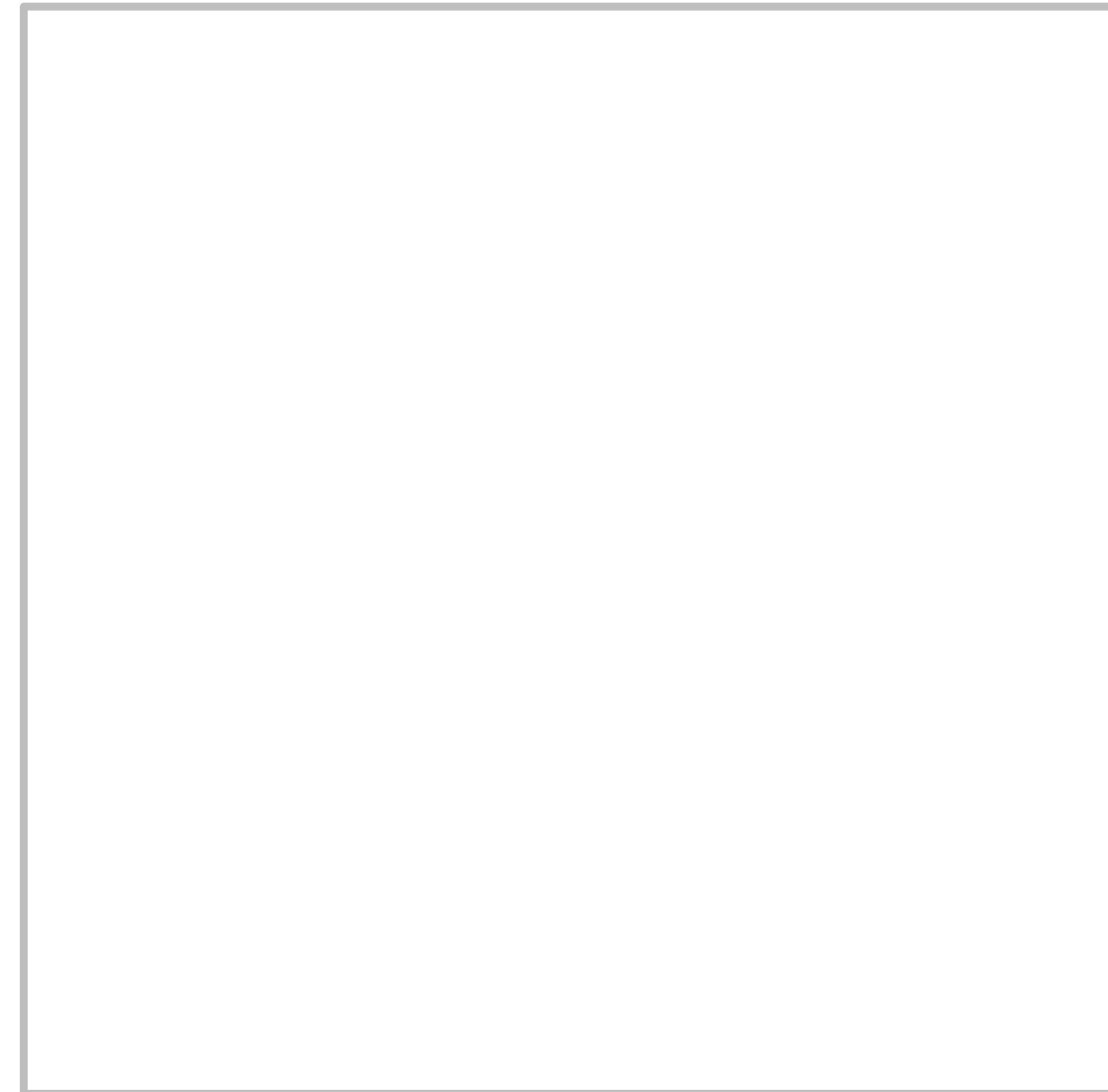
LIVE CHALLENGE

Automatic category graphs



input

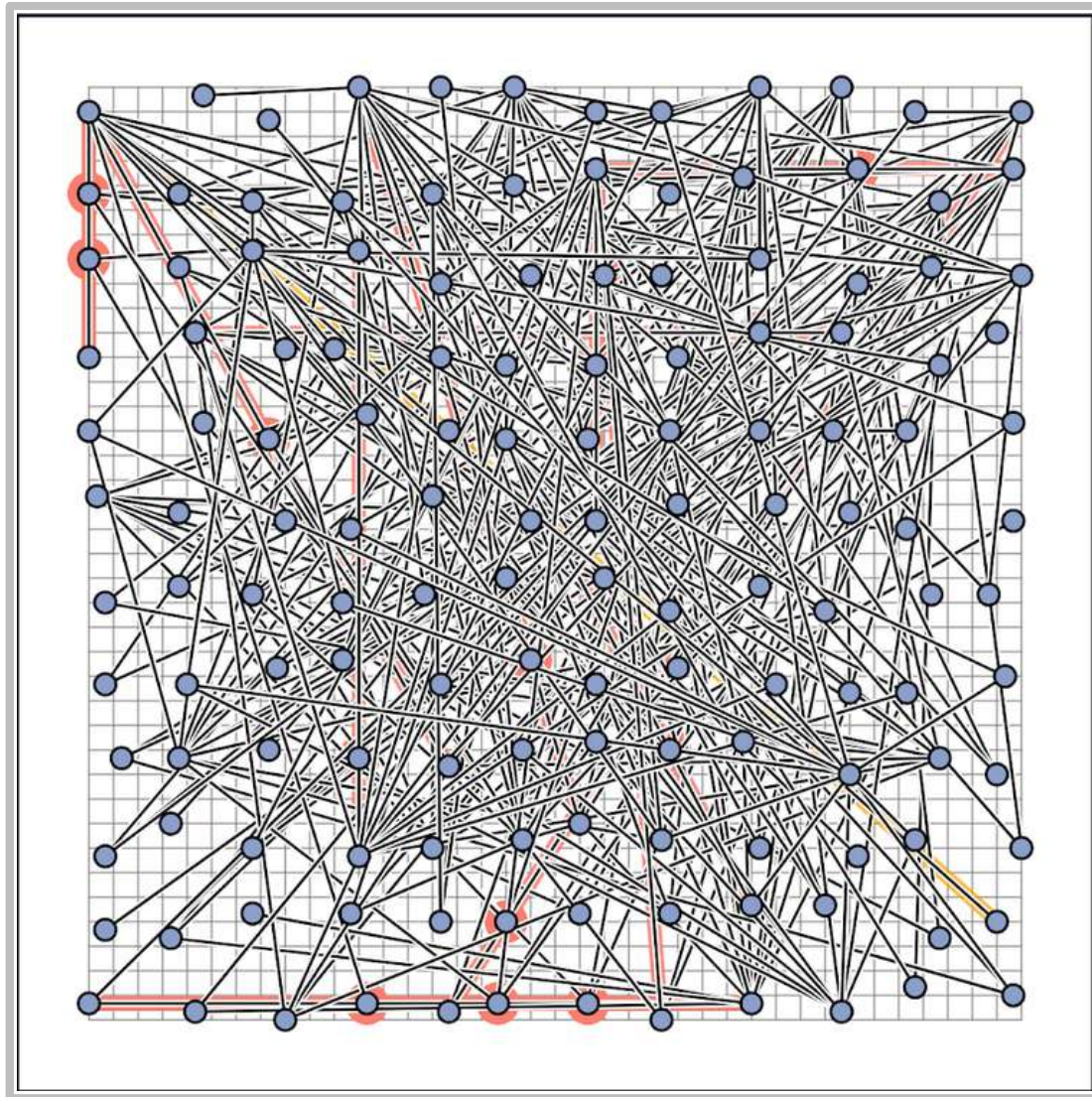
graph **2**



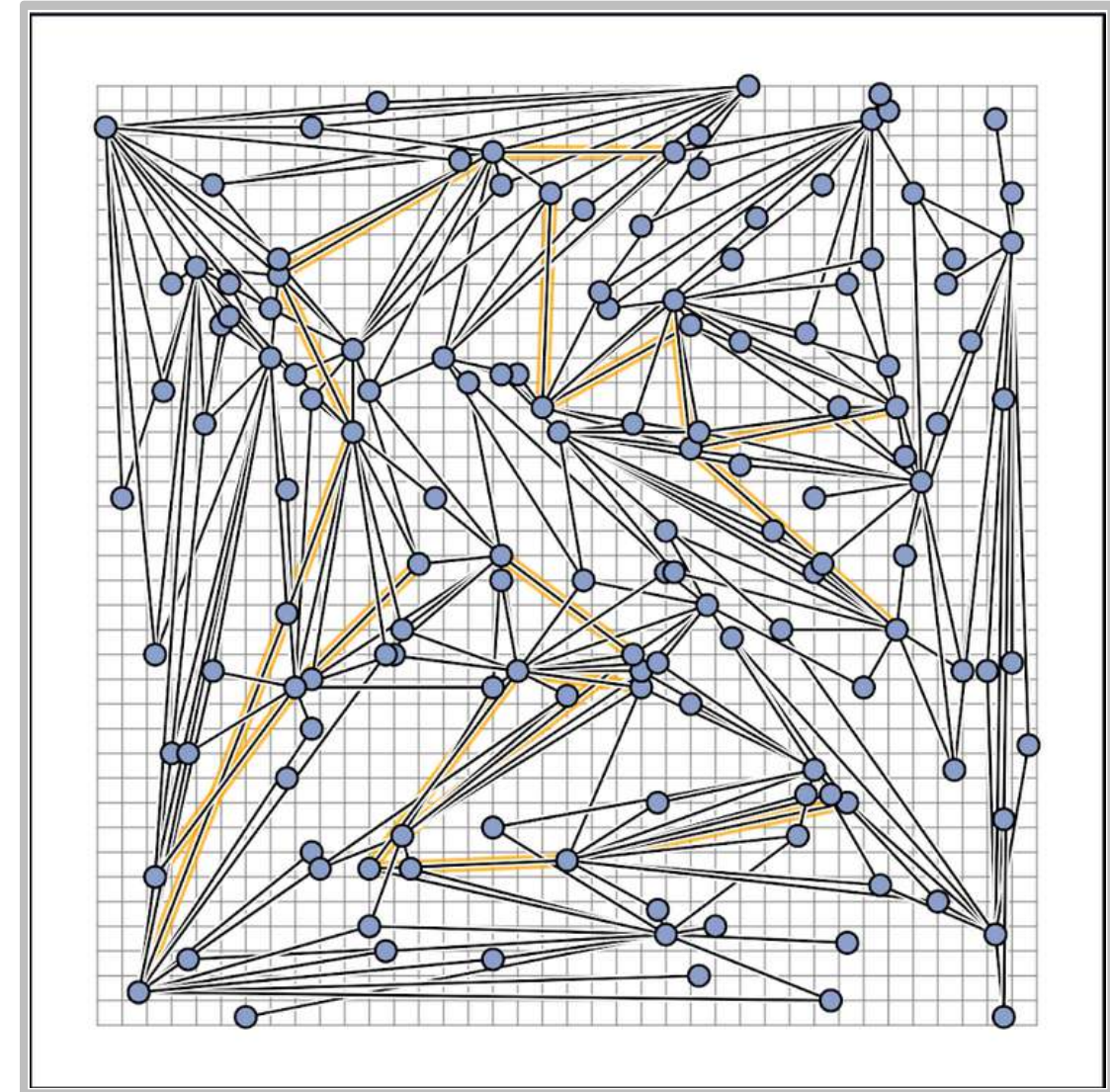
best automatic

LIVE CHALLENGE

Automatic category graphs



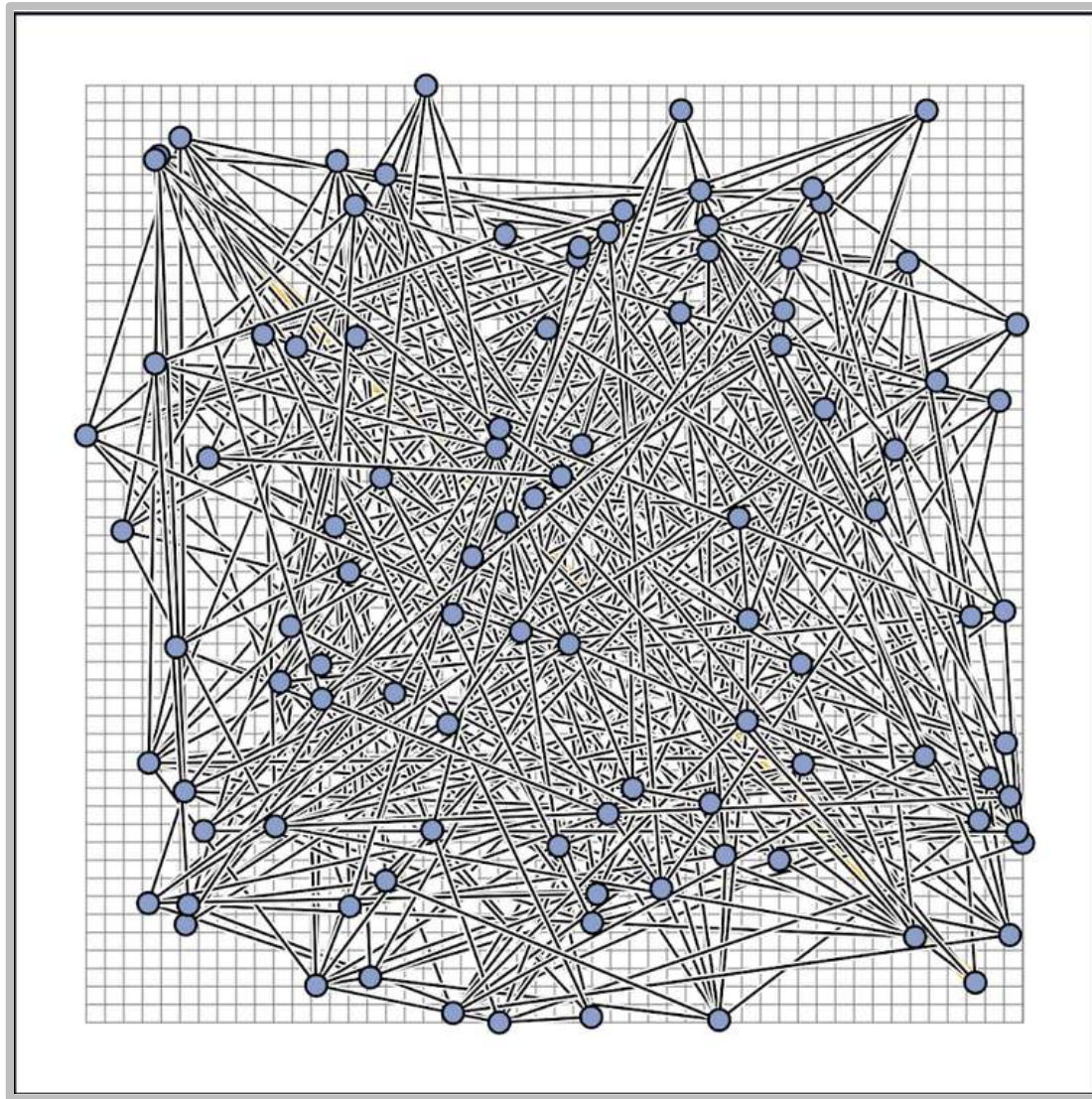
input
graph **2**



best automatic
Christoph
3-planar

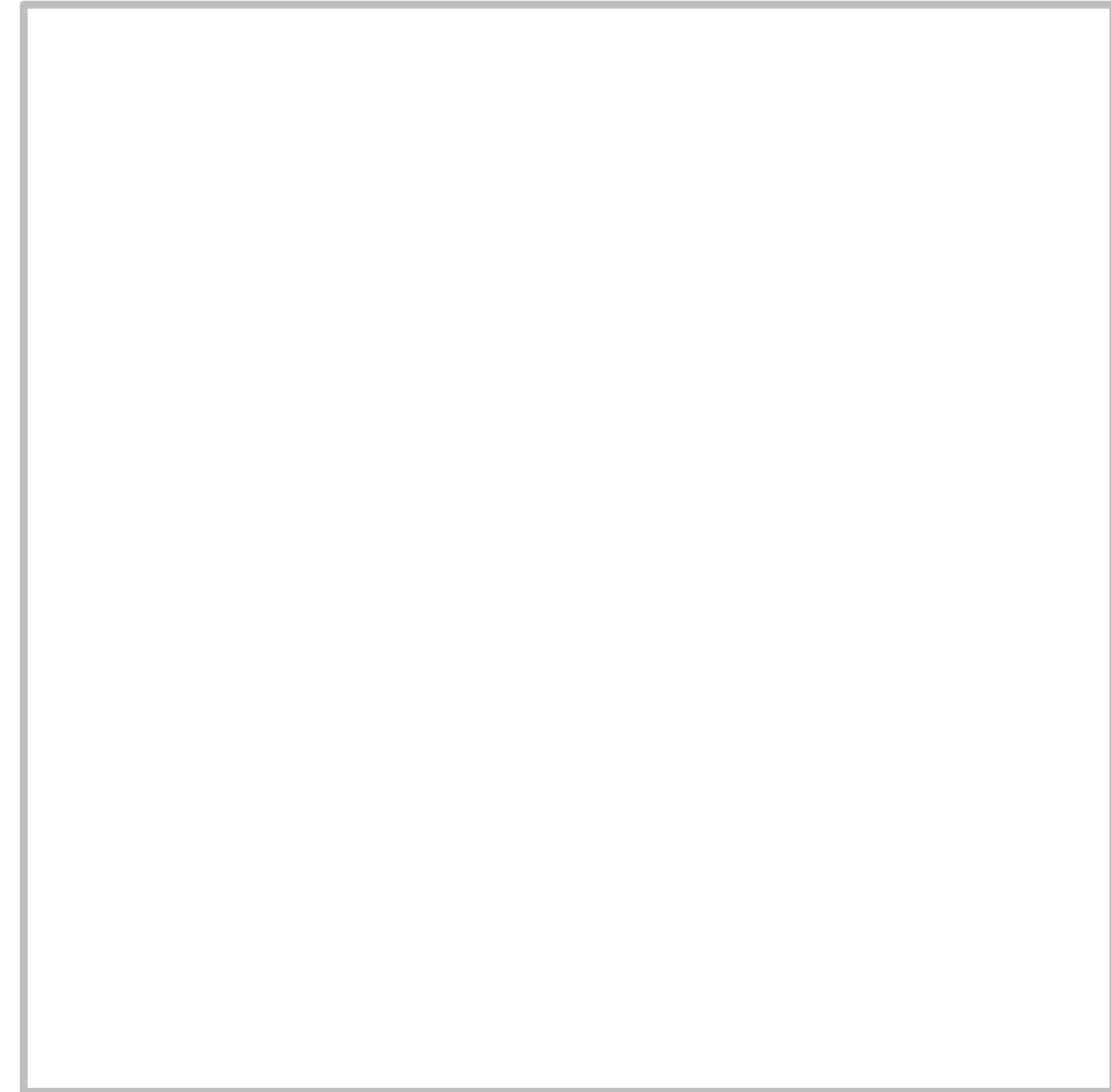
LIVE CHALLENGE

Automatic category graphs



input

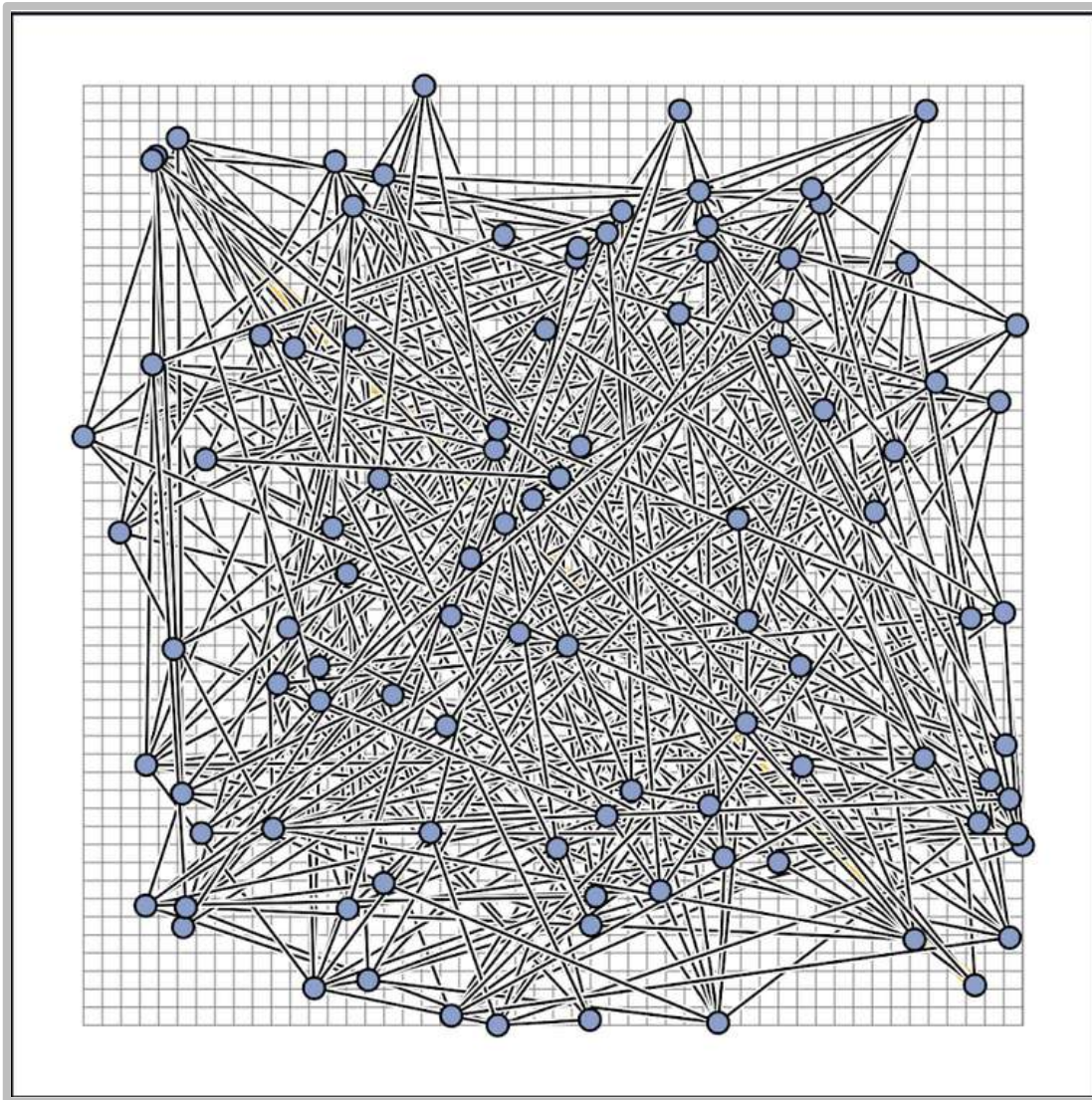
graph 3



best automatic

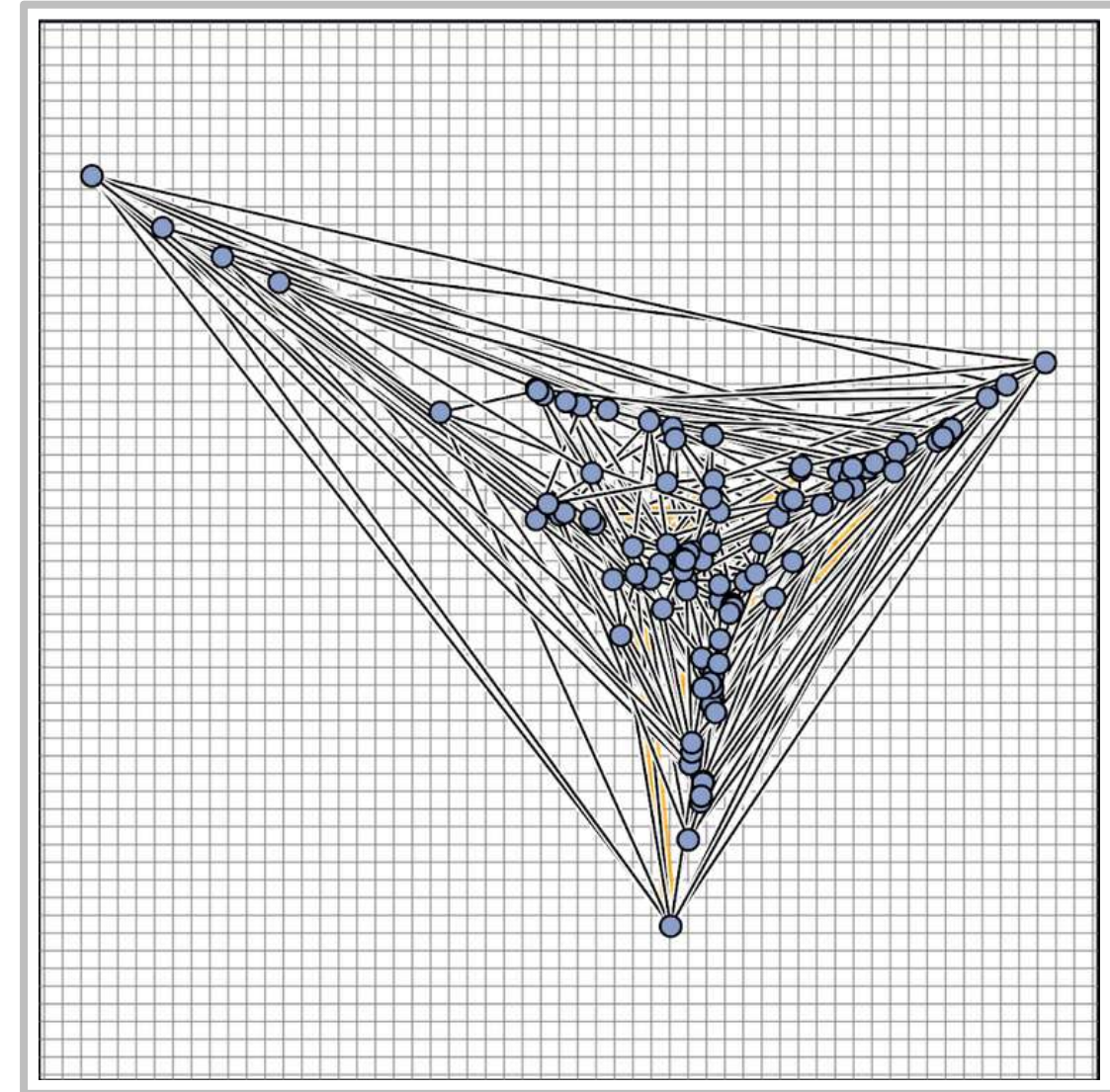
LIVE CHALLENGE

Automatic category graphs



input

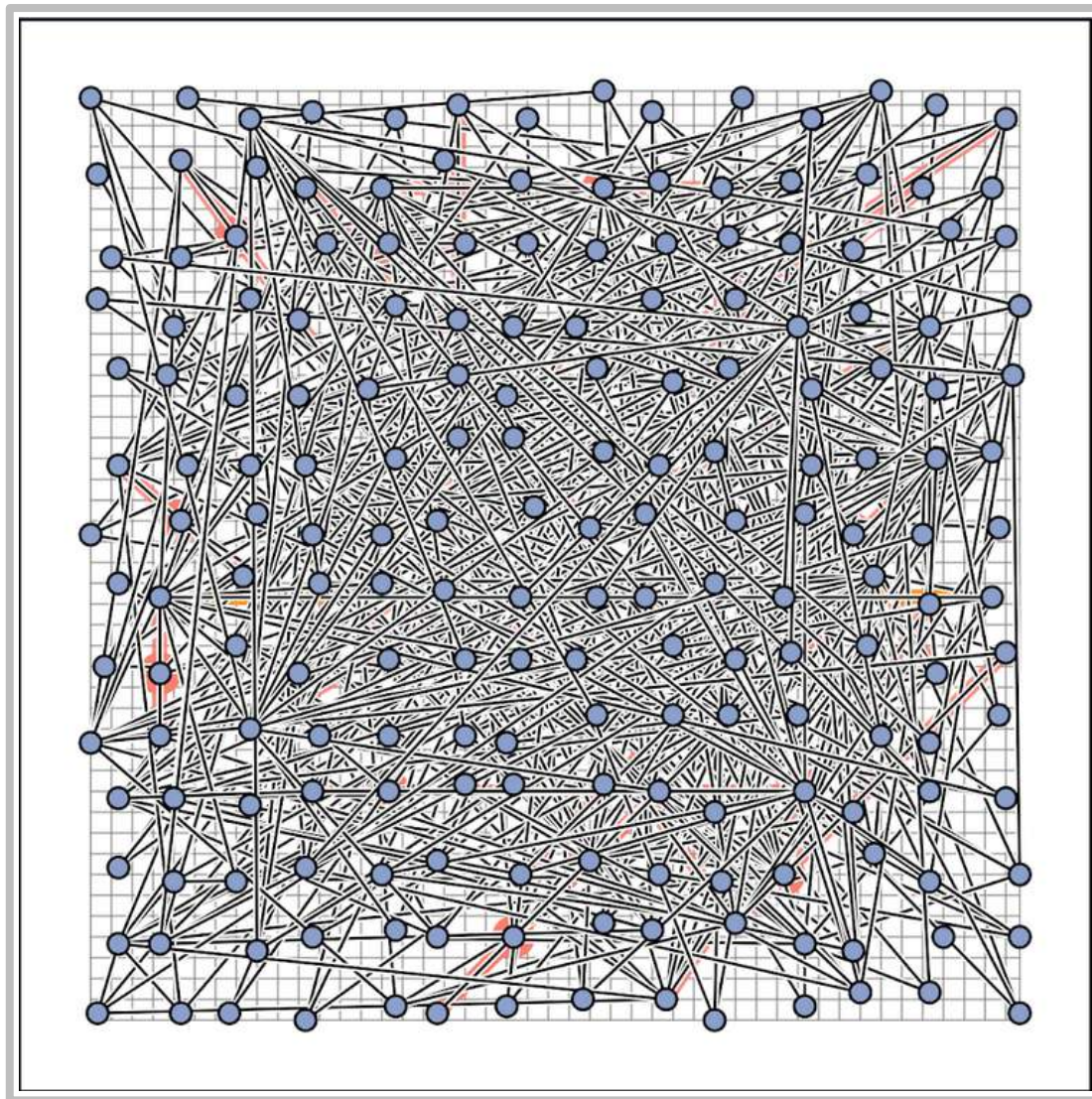
graph **3**



best automatic
OMEGA
34-planar

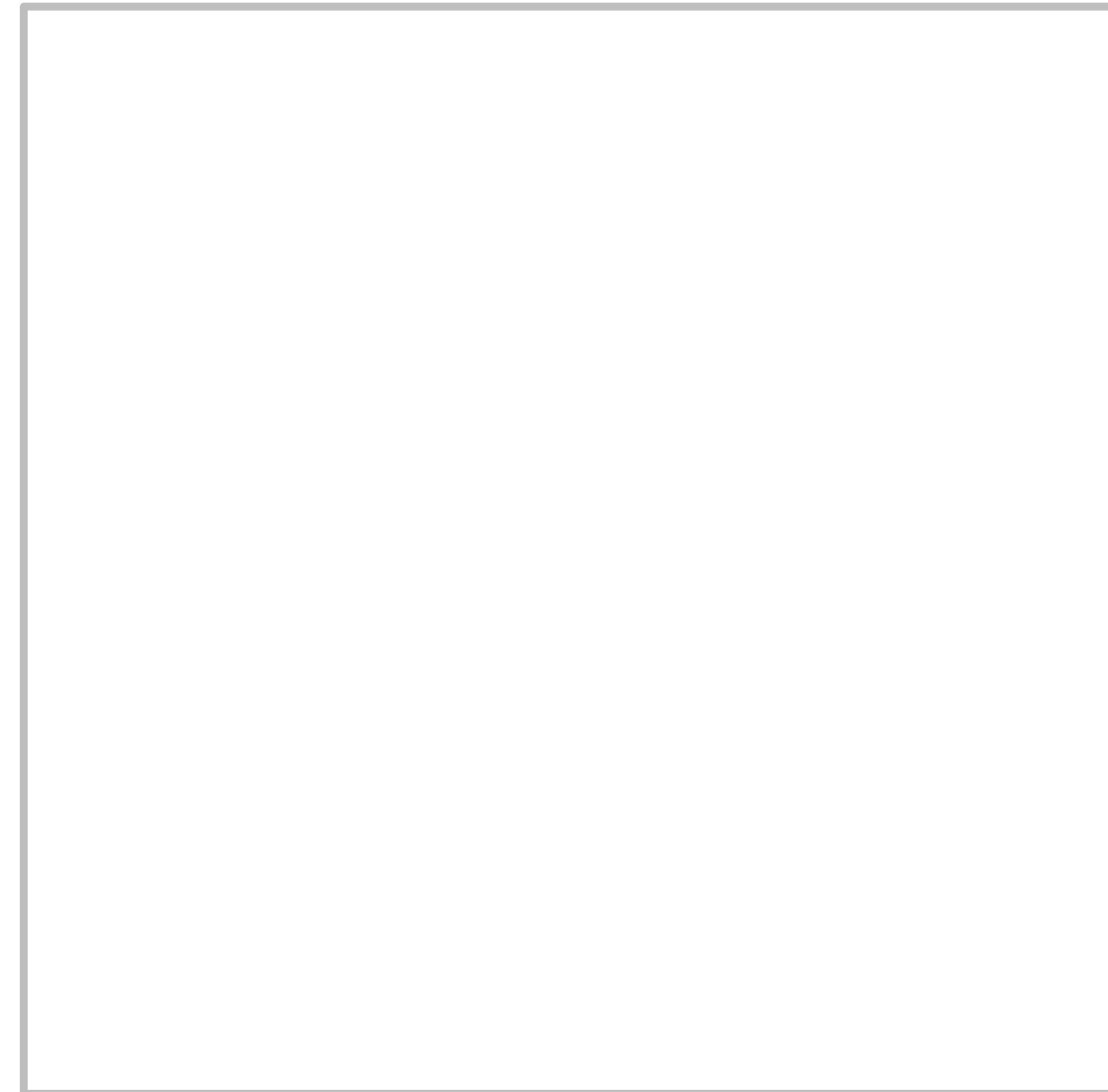
LIVE CHALLENGE

Automatic category graphs



input

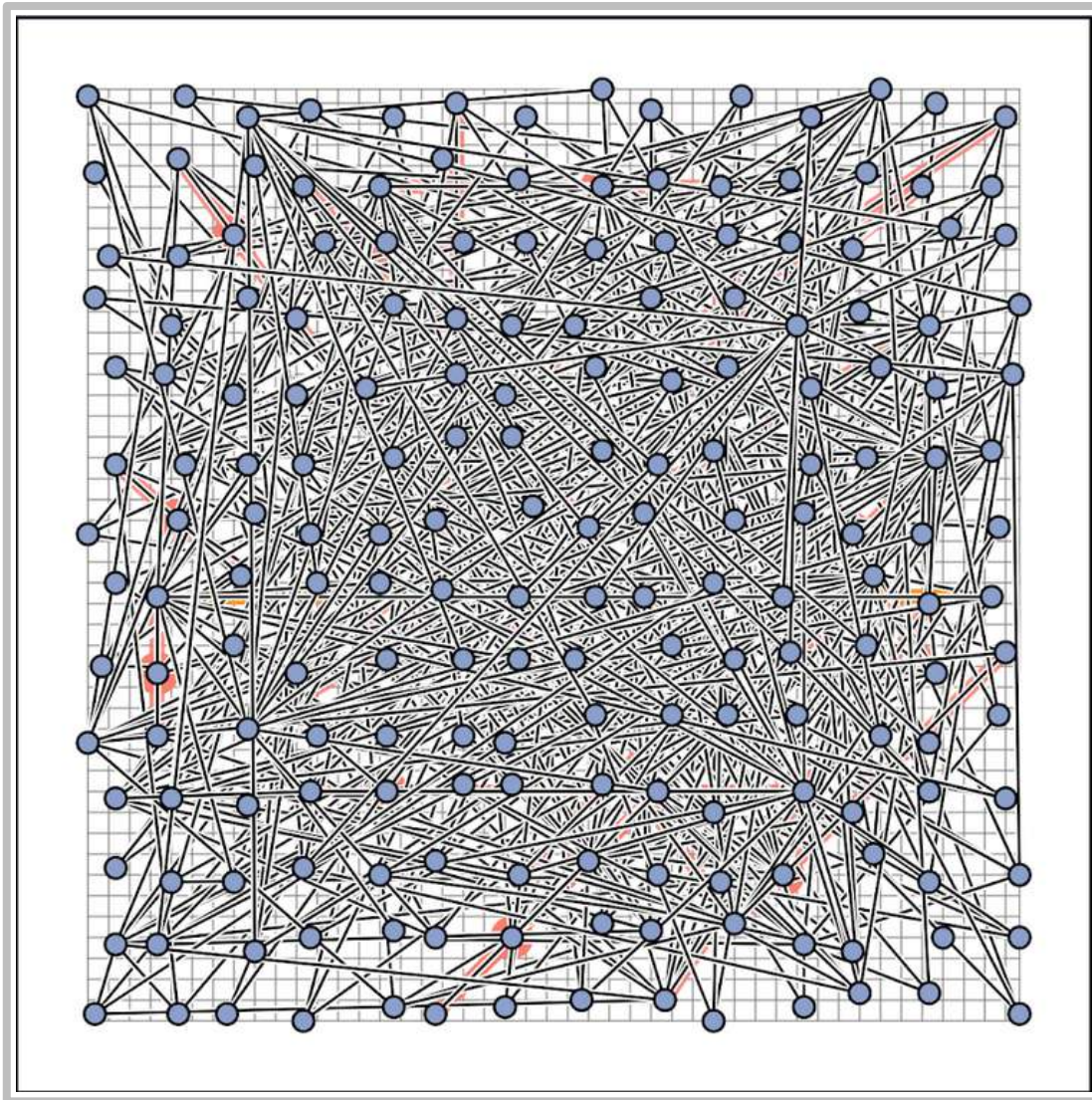
graph 4



best automatic

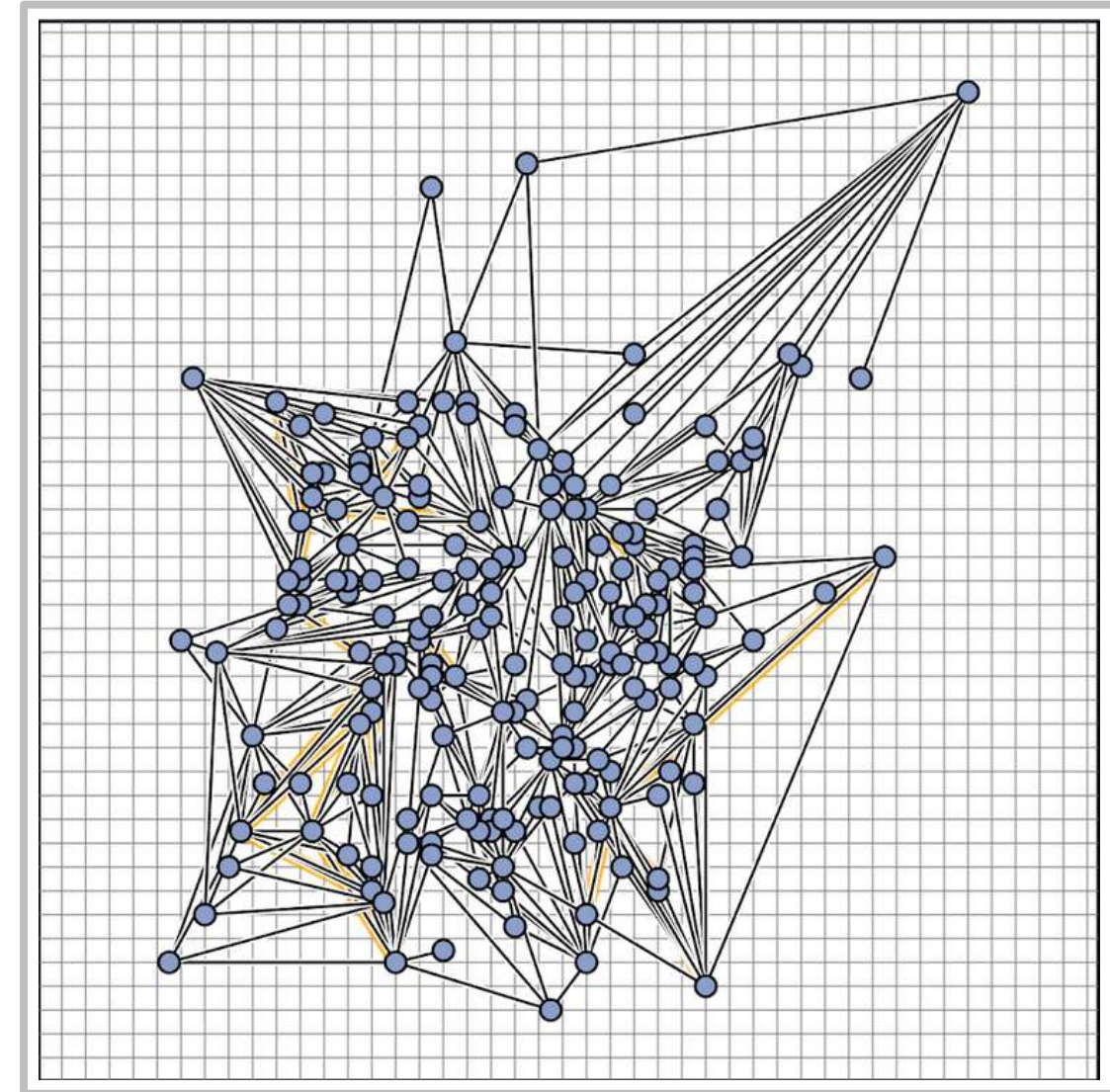
LIVE CHALLENGE

Automatic category graphs



input

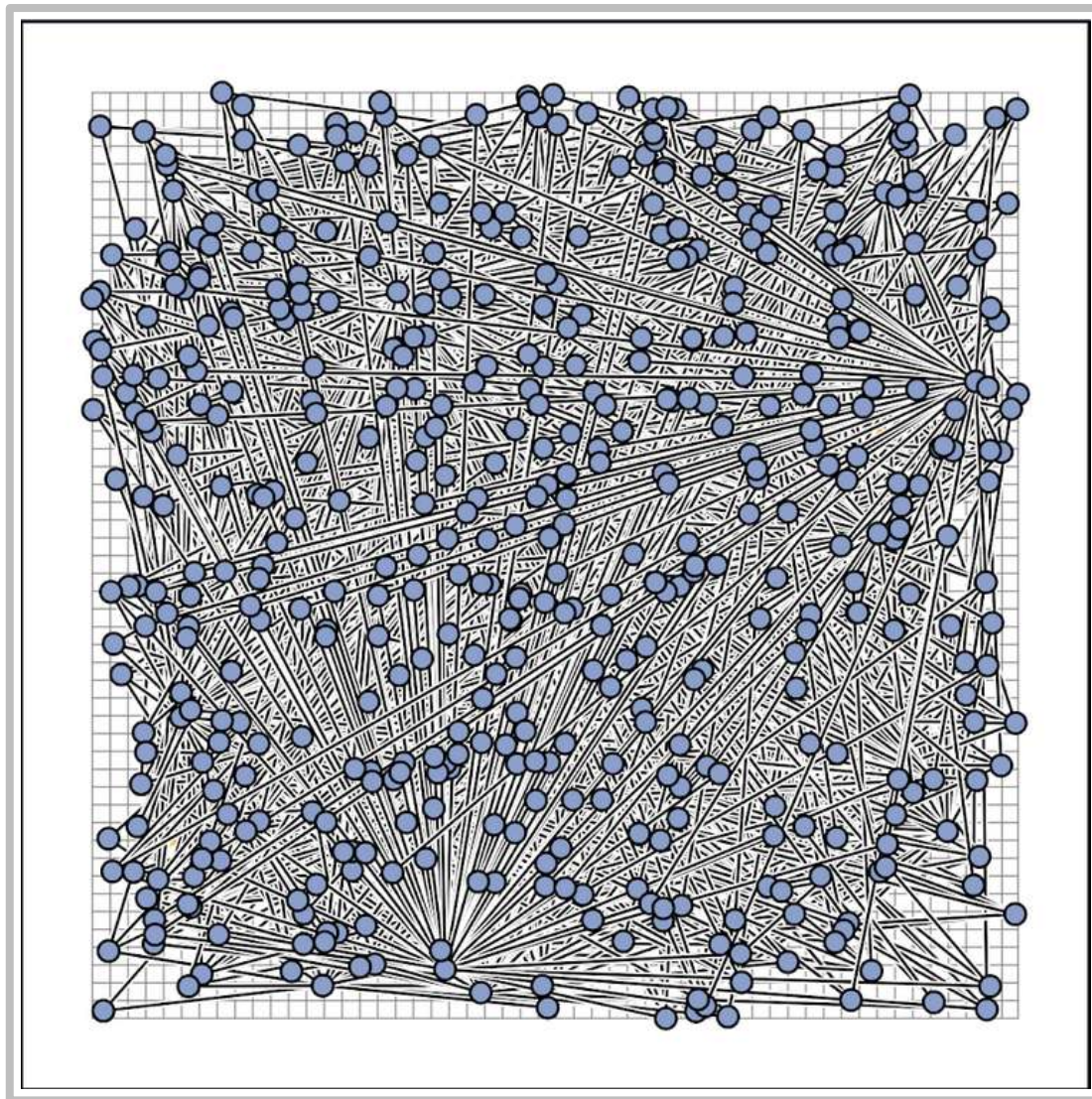
graph **4**



best automatic
OMEGA
6-planar

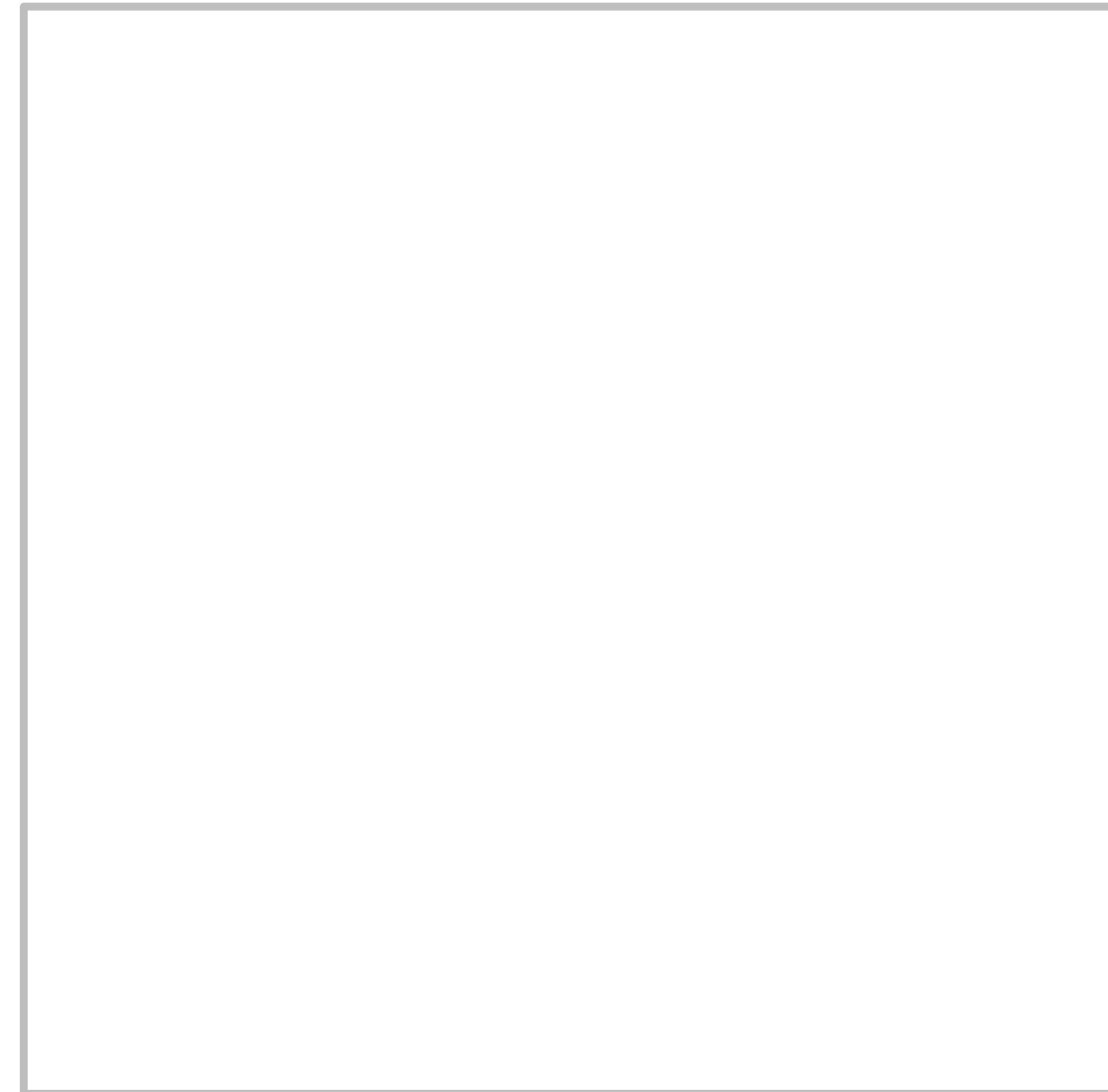
LIVE CHALLENGE

Automatic category graphs



input

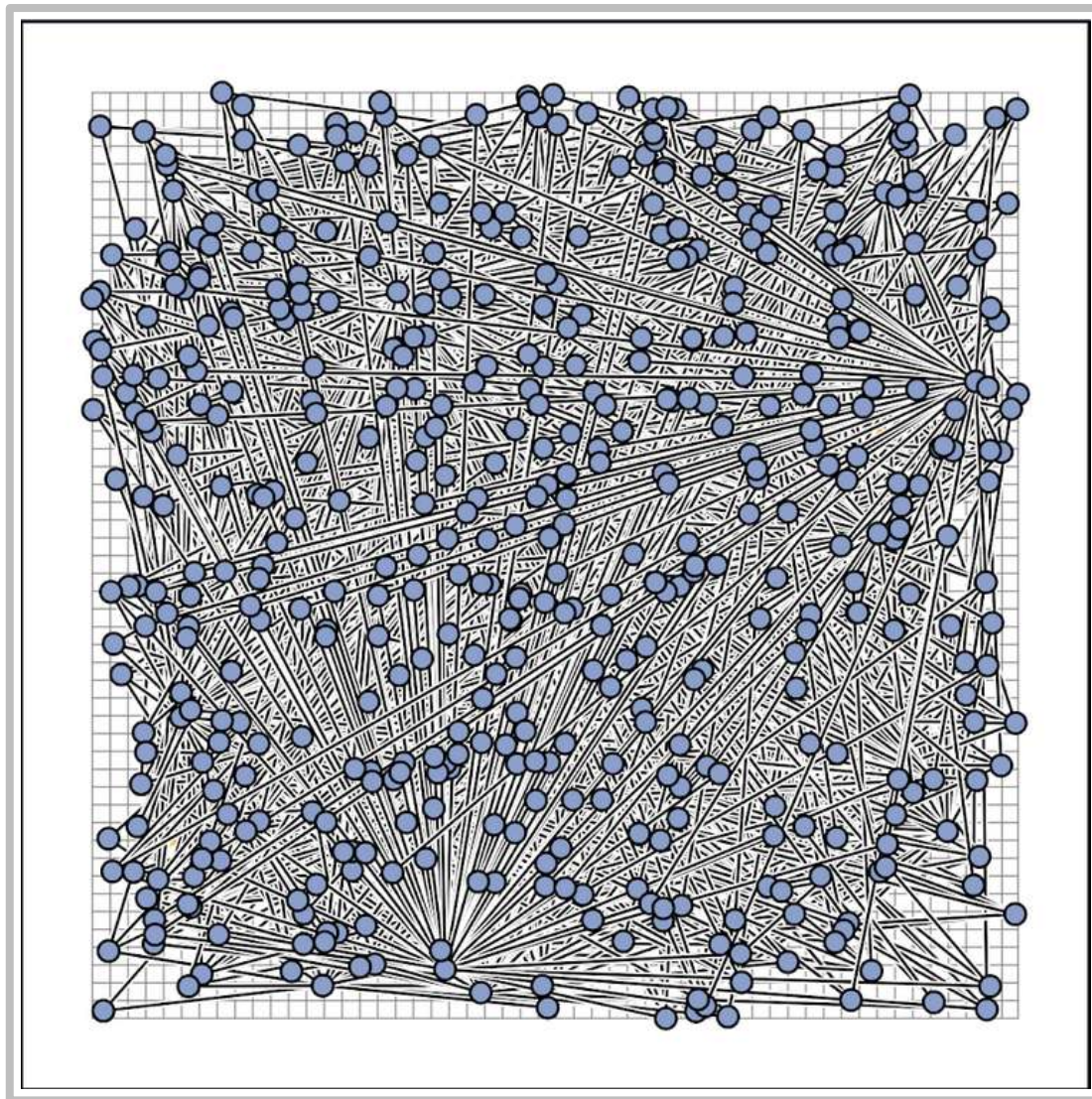
graph **5**



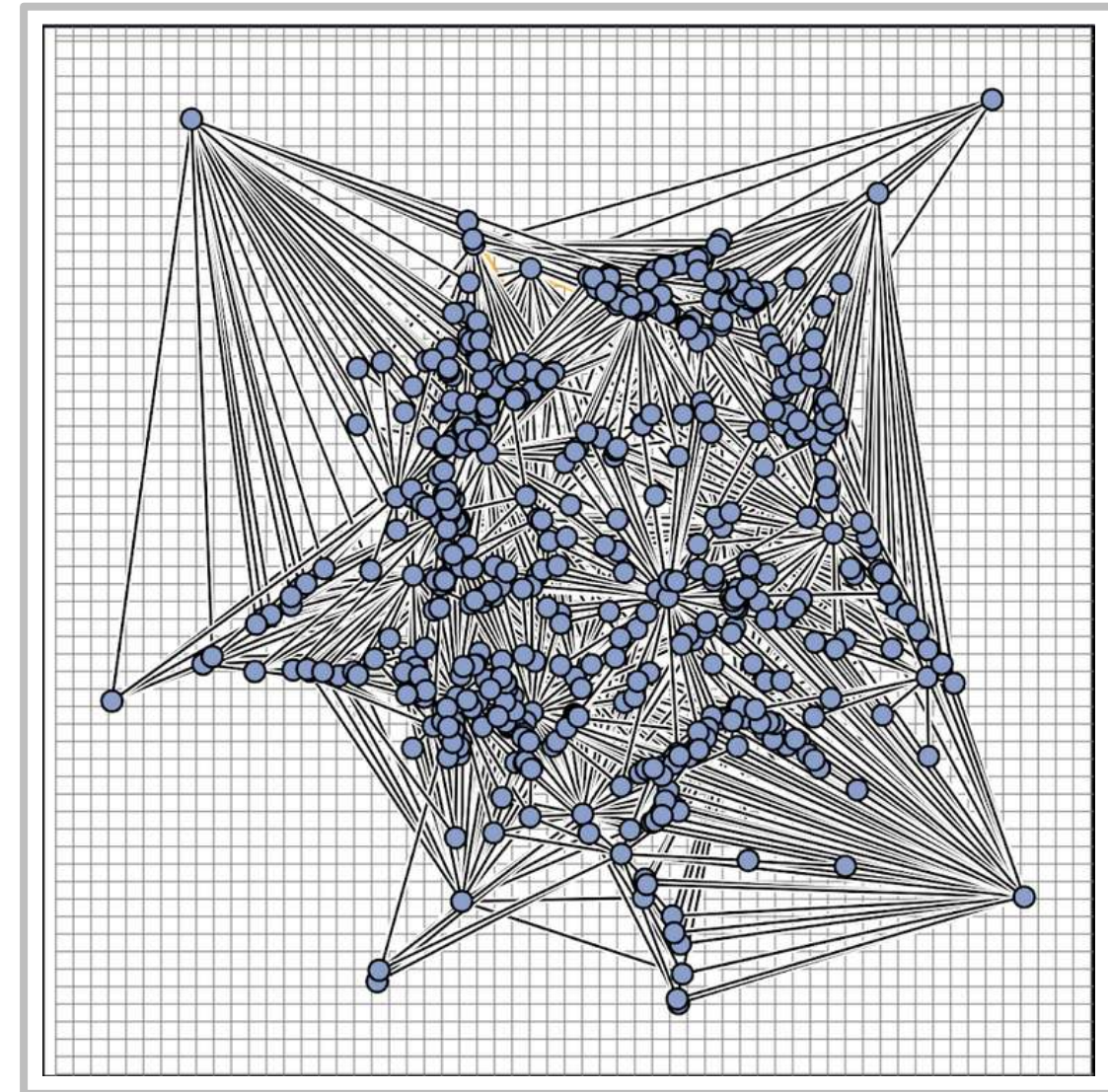
best automatic

LIVE CHALLENGE

Automatic category graphs



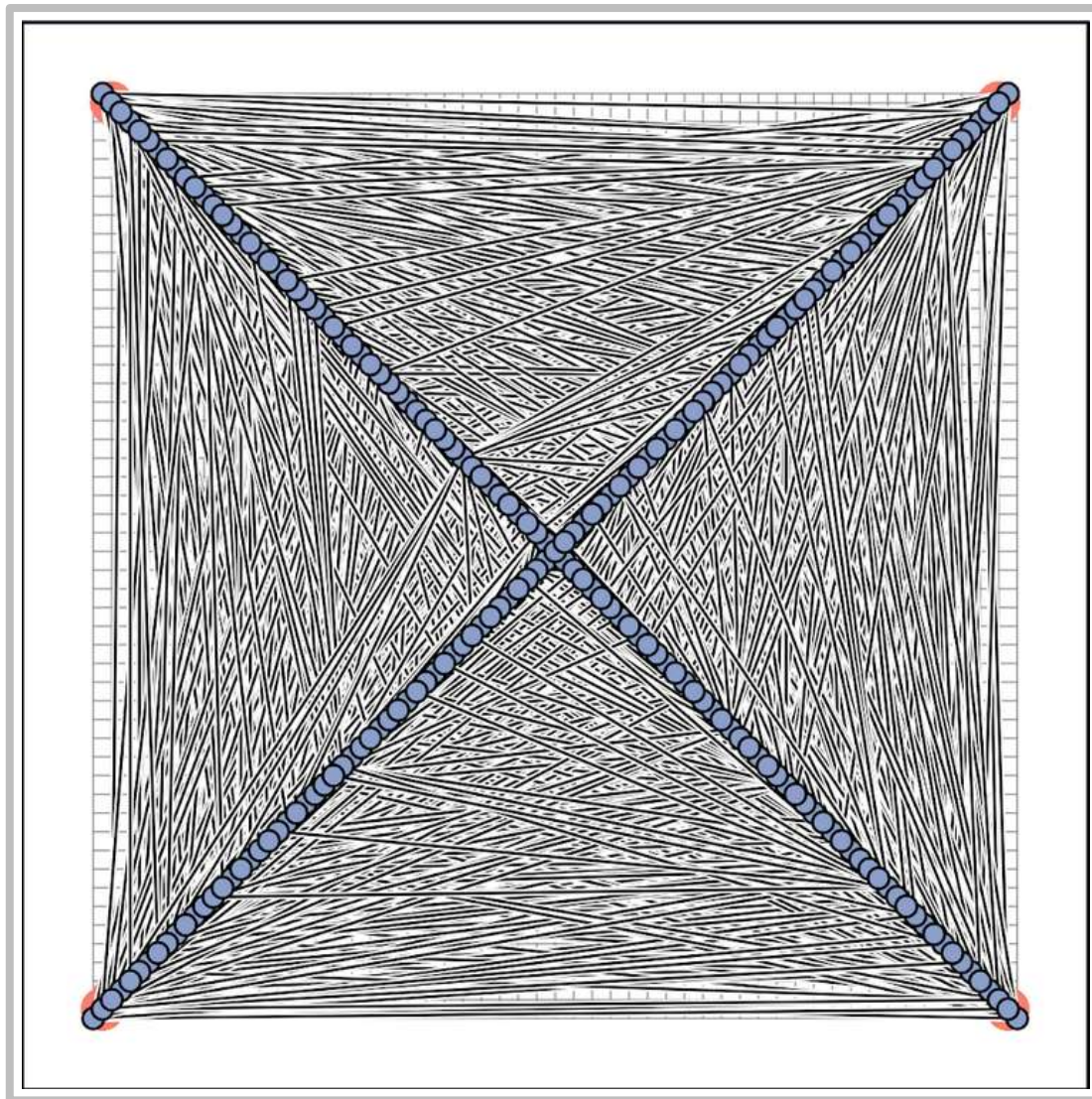
input
graph **5**



best automatic
OMEGA
76-planar

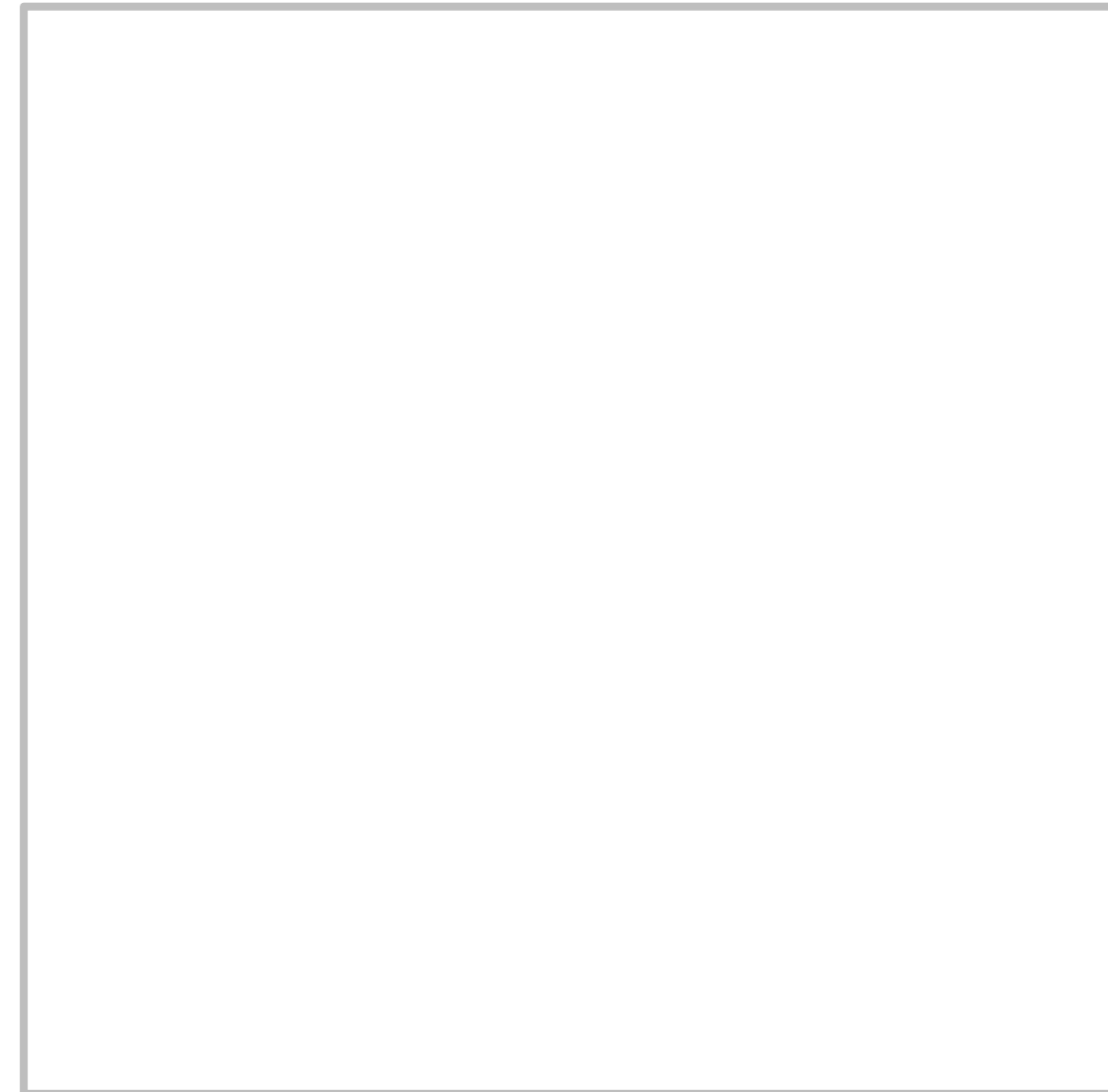
LIVE CHALLENGE

Automatic category graphs



input

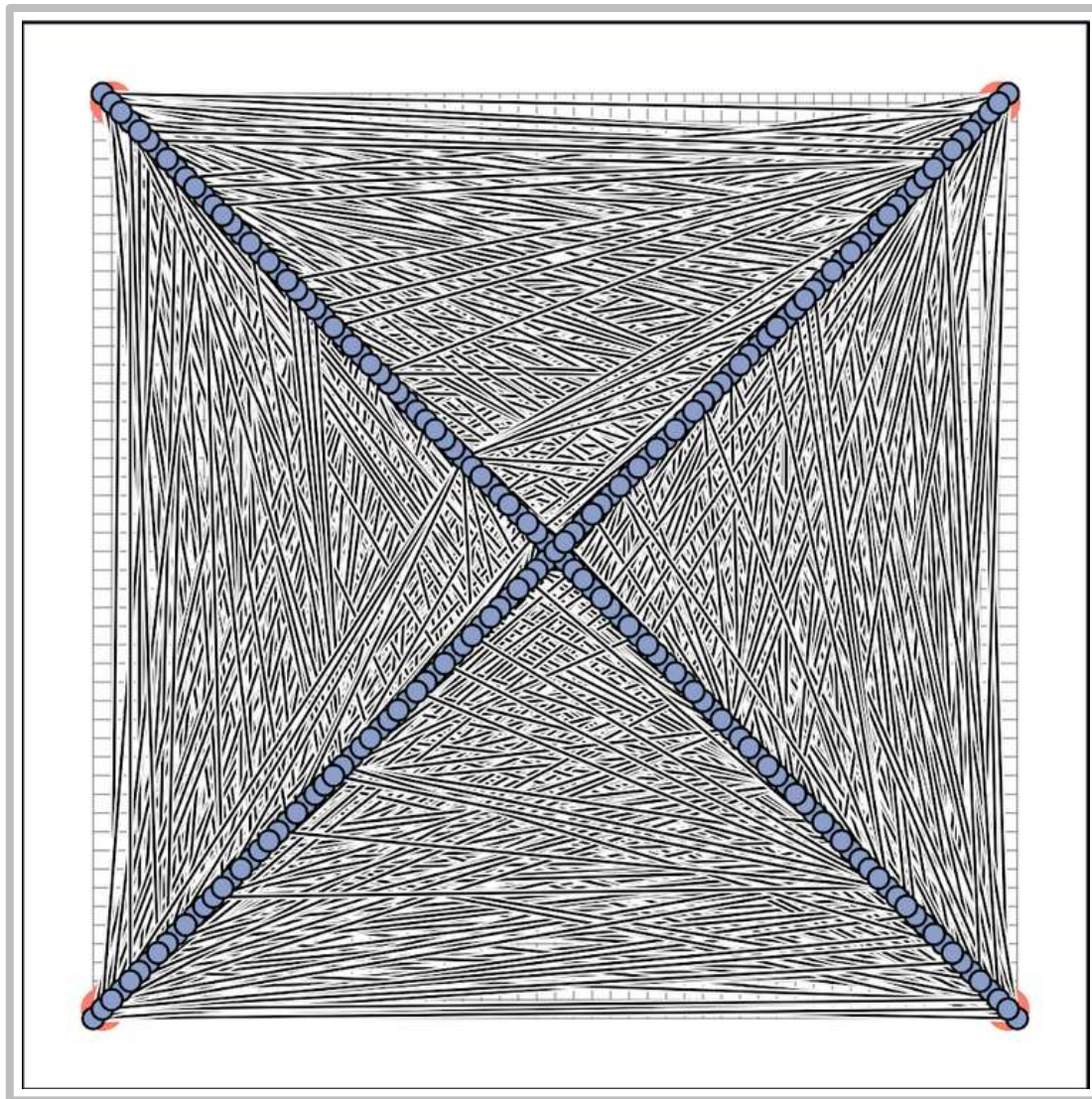
graph 6



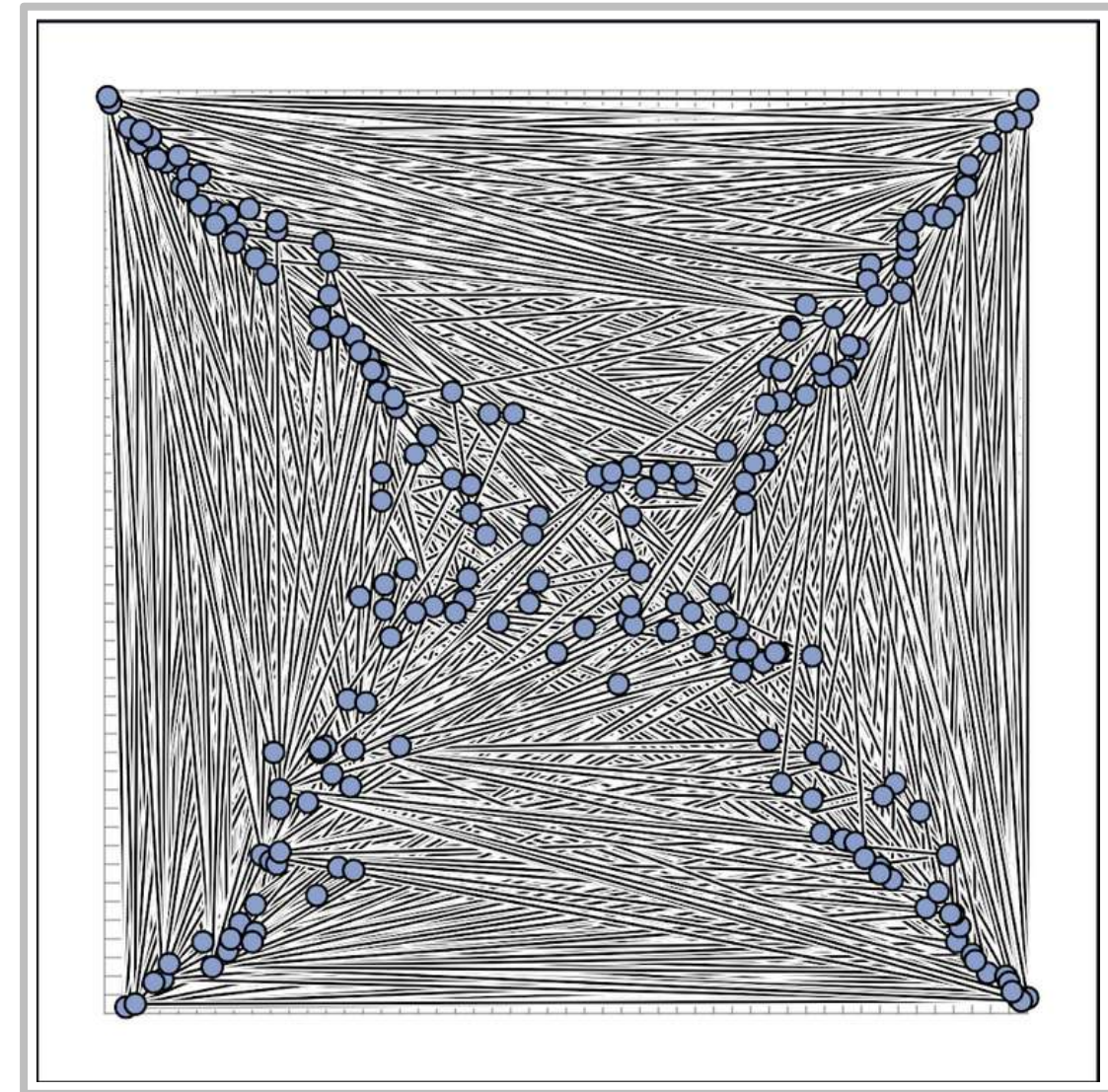
best automatic

LIVE CHALLENGE

Automatic category graphs



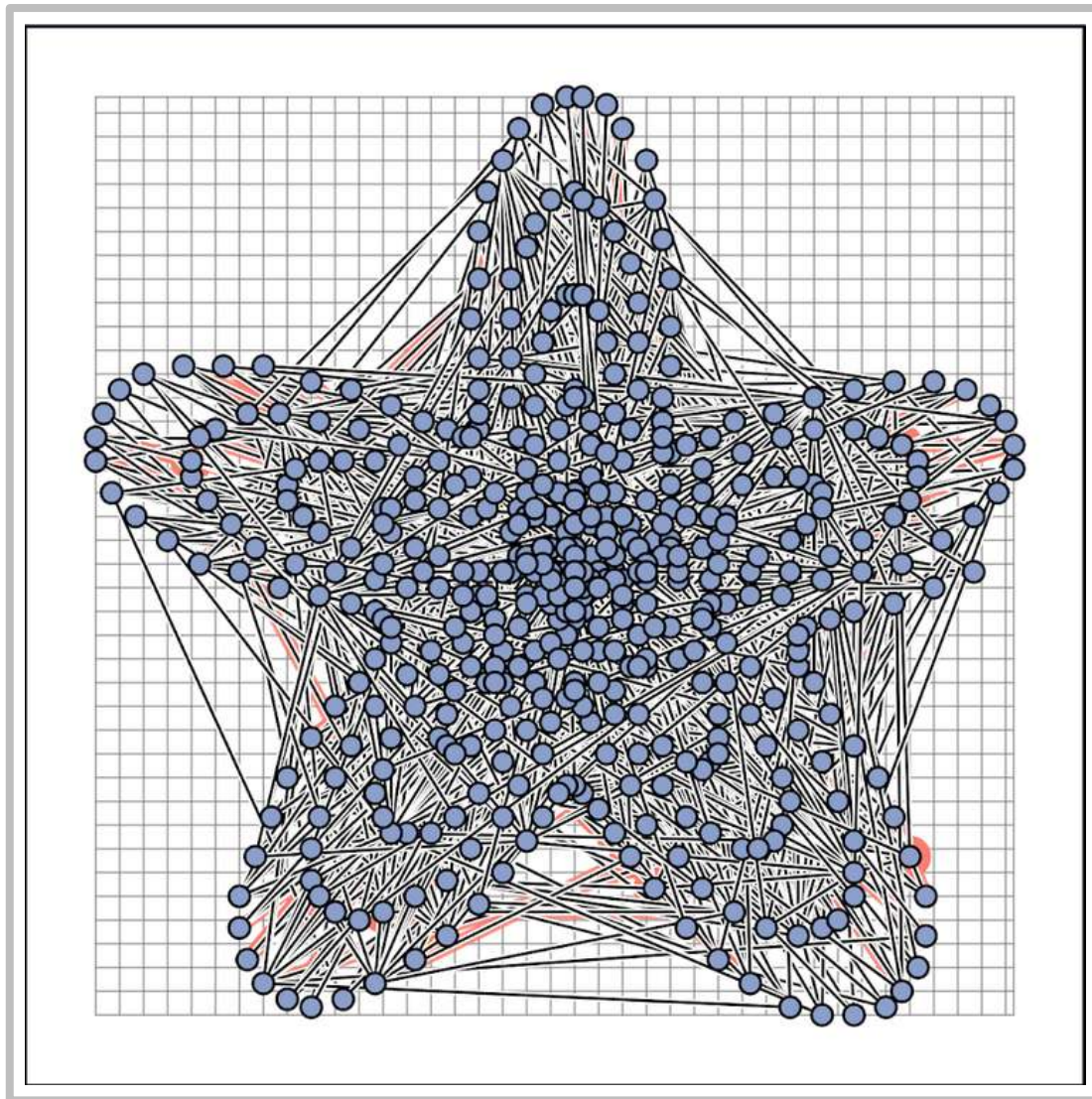
input
graph **6**



best automatic
Christoph
560-planar

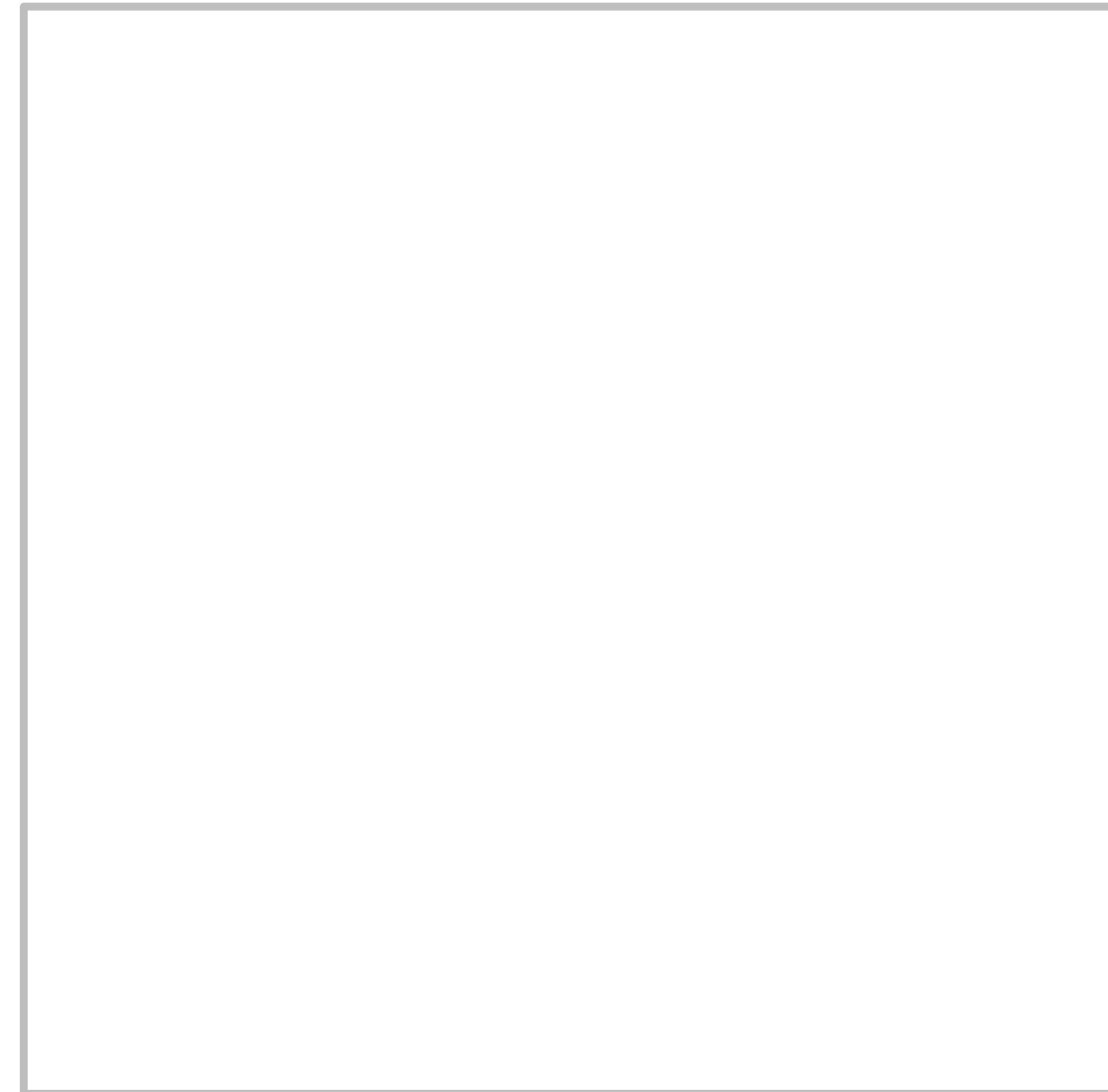
LIVE CHALLENGE

Automatic category graphs



input

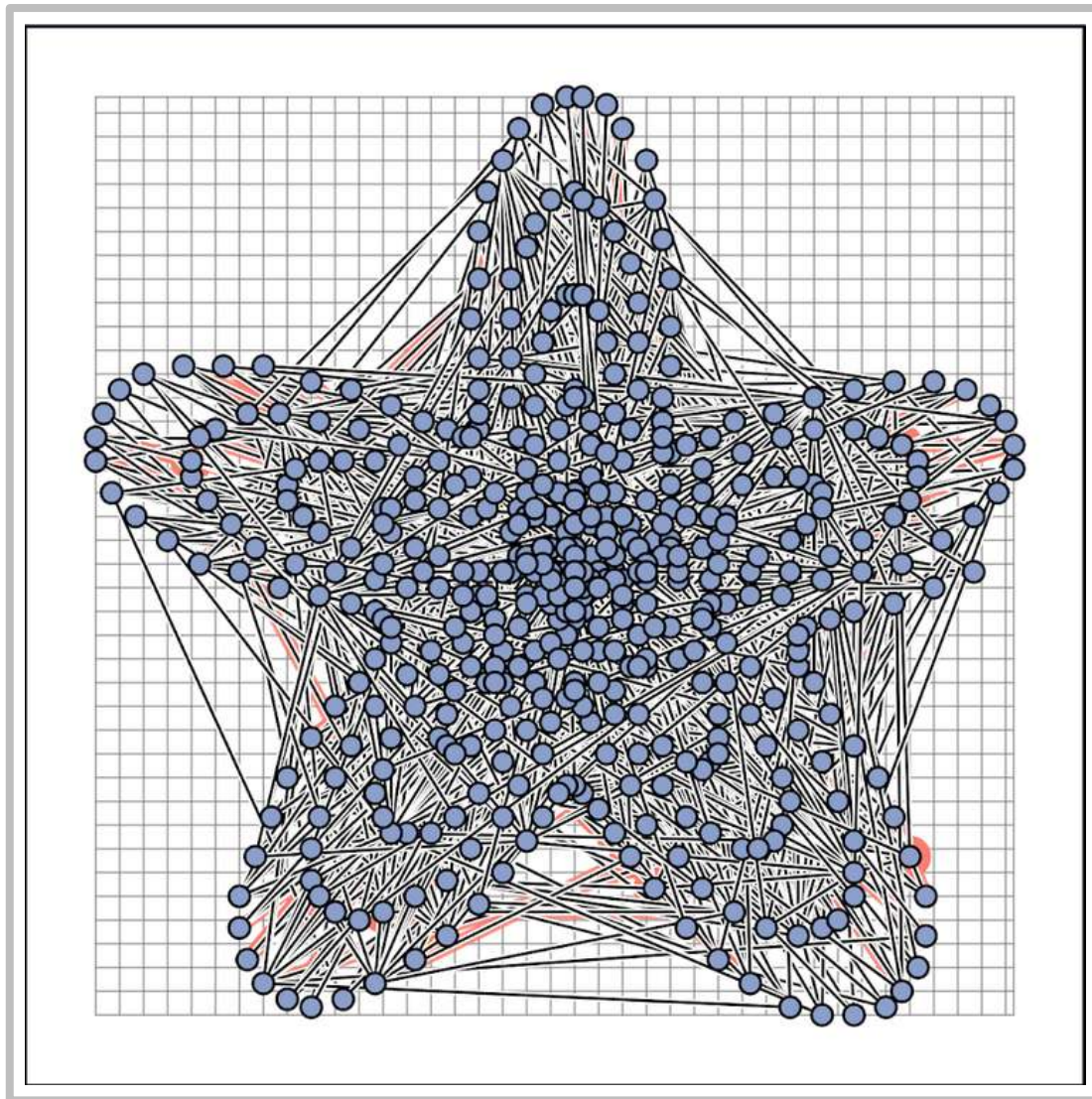
graph **7**



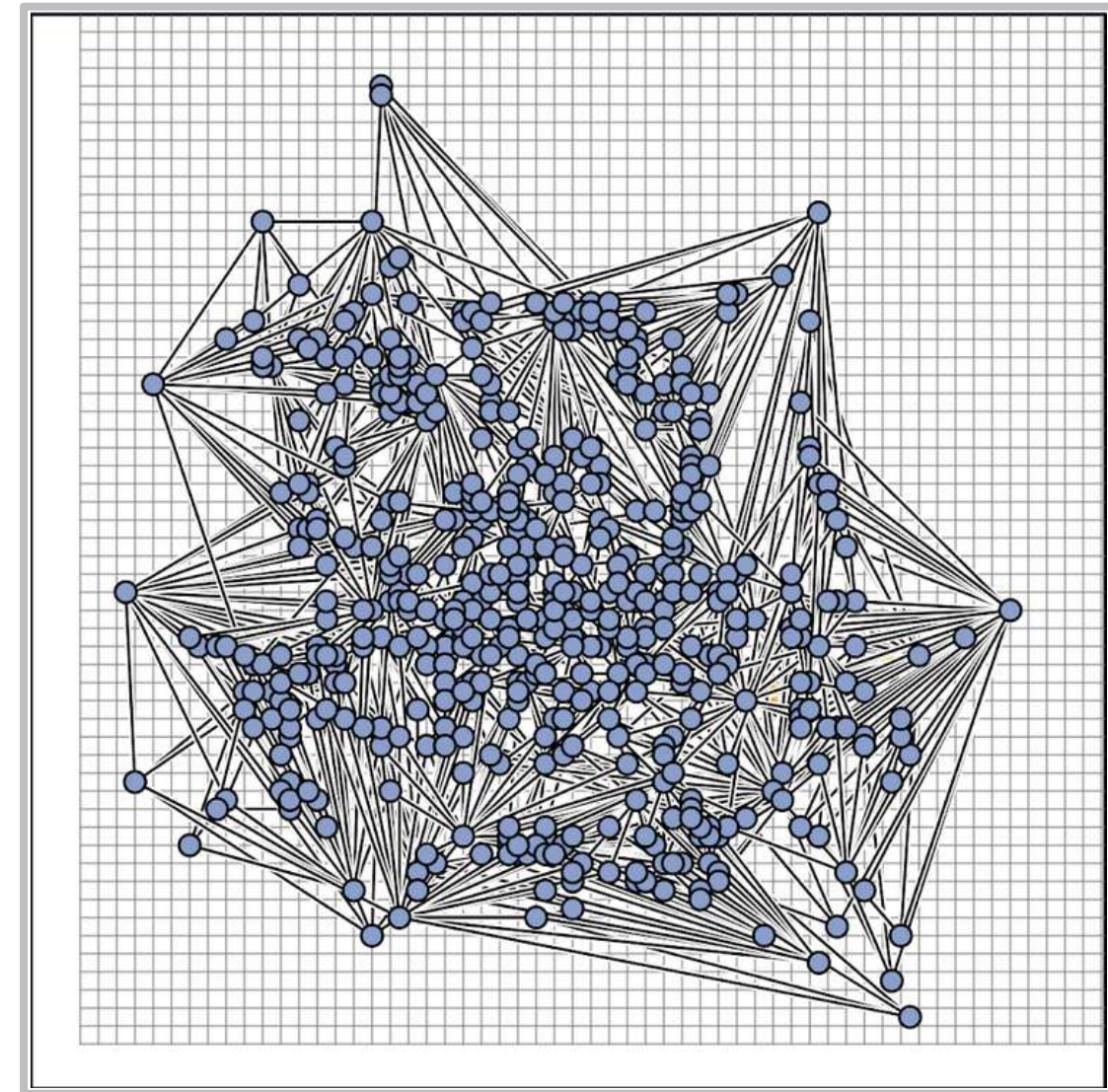
best automatic

LIVE CHALLENGE

Automatic category graphs



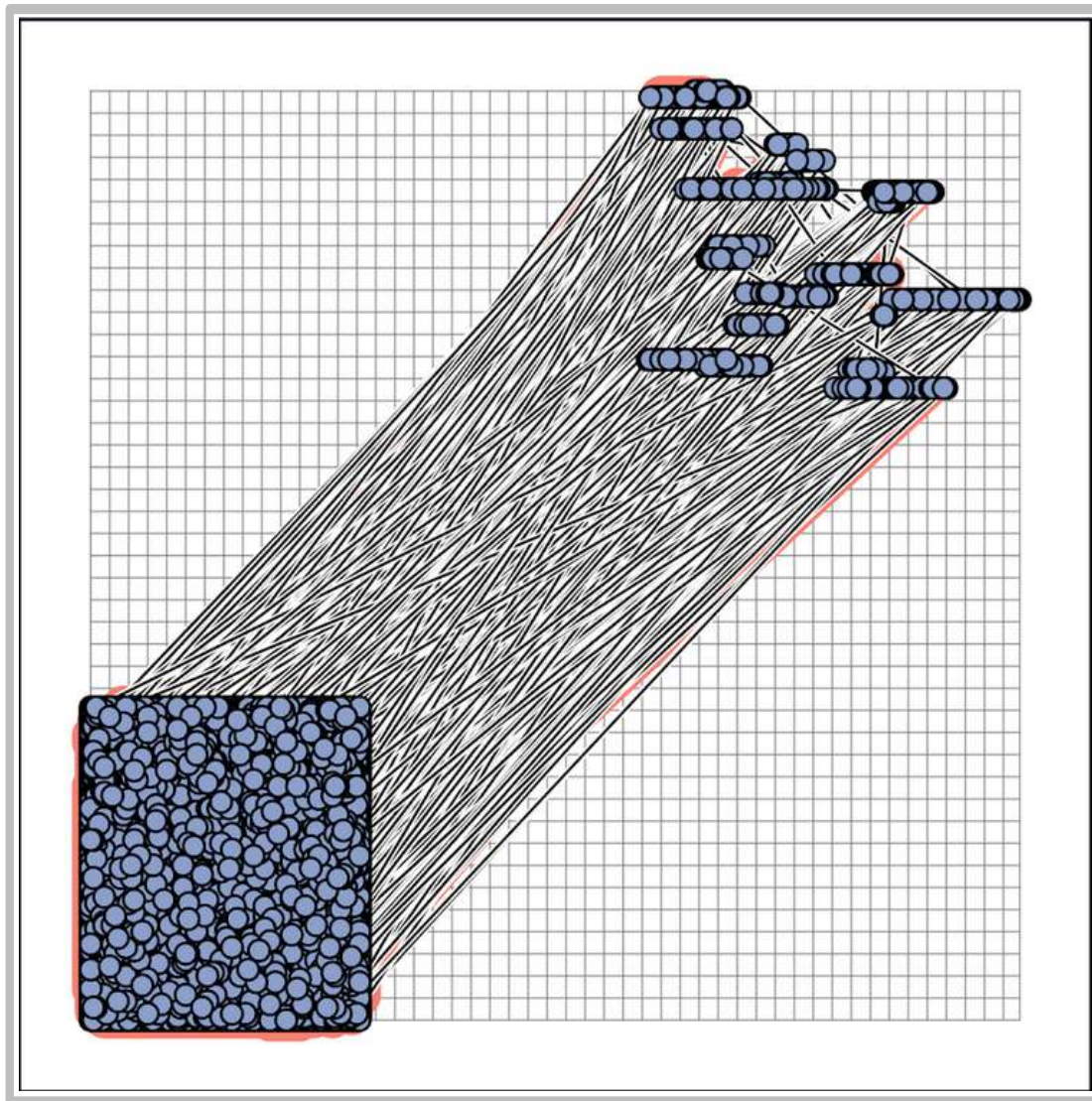
input
graph **7**



best automatic
OMEGA
31-planar

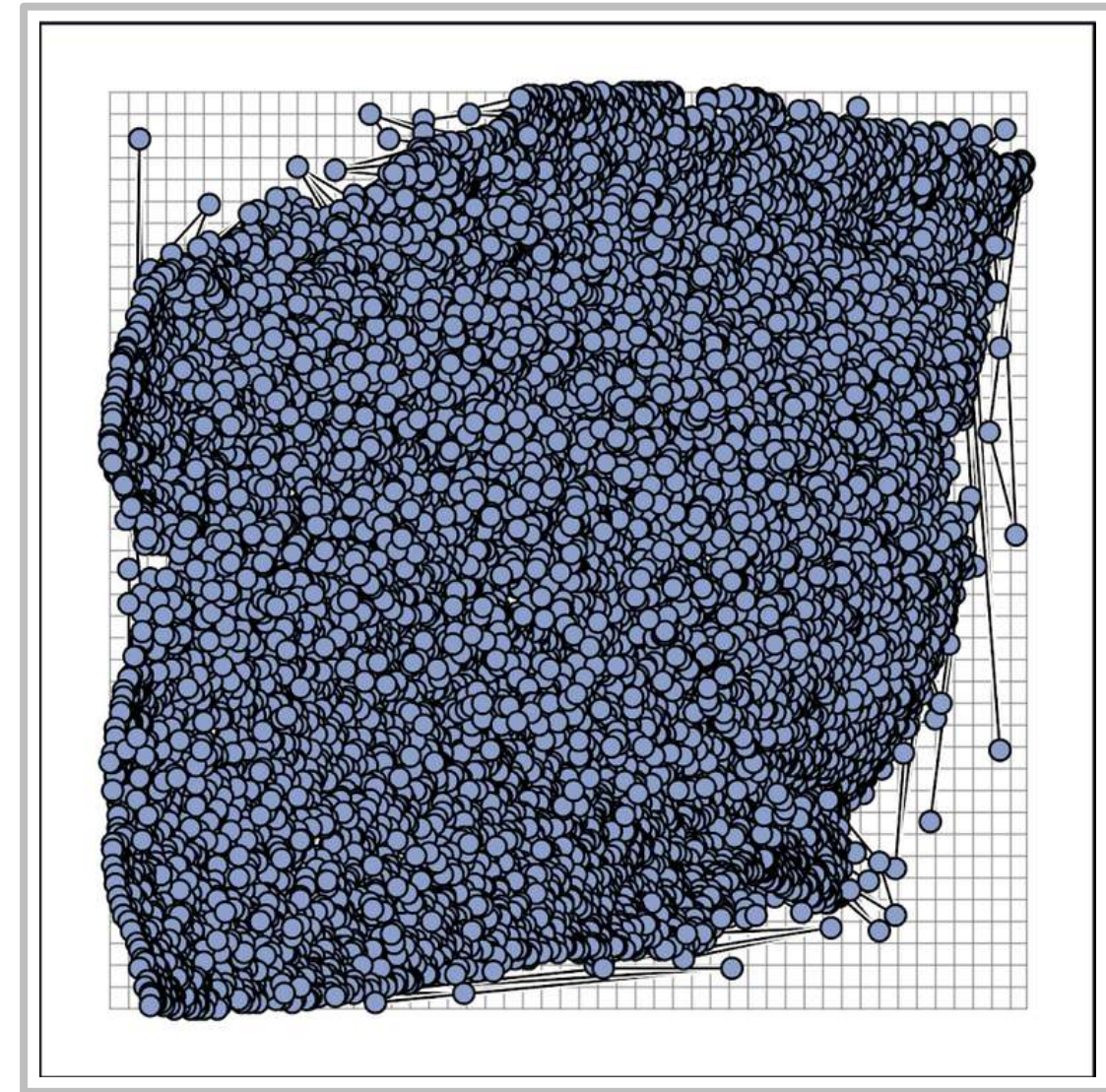
LIVE CHALLENGE

Automatic category graphs



input

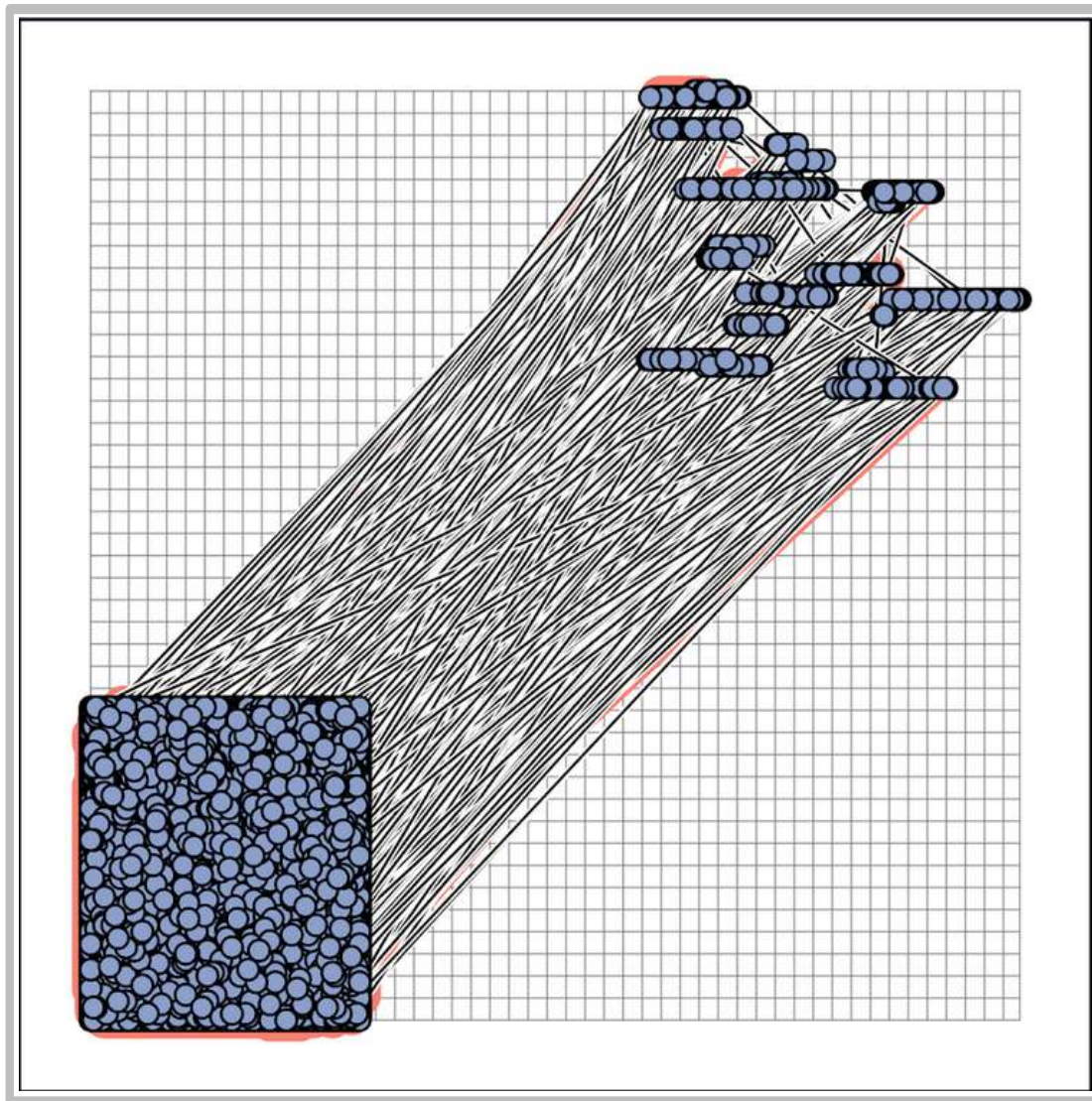
graph 8



best automatic

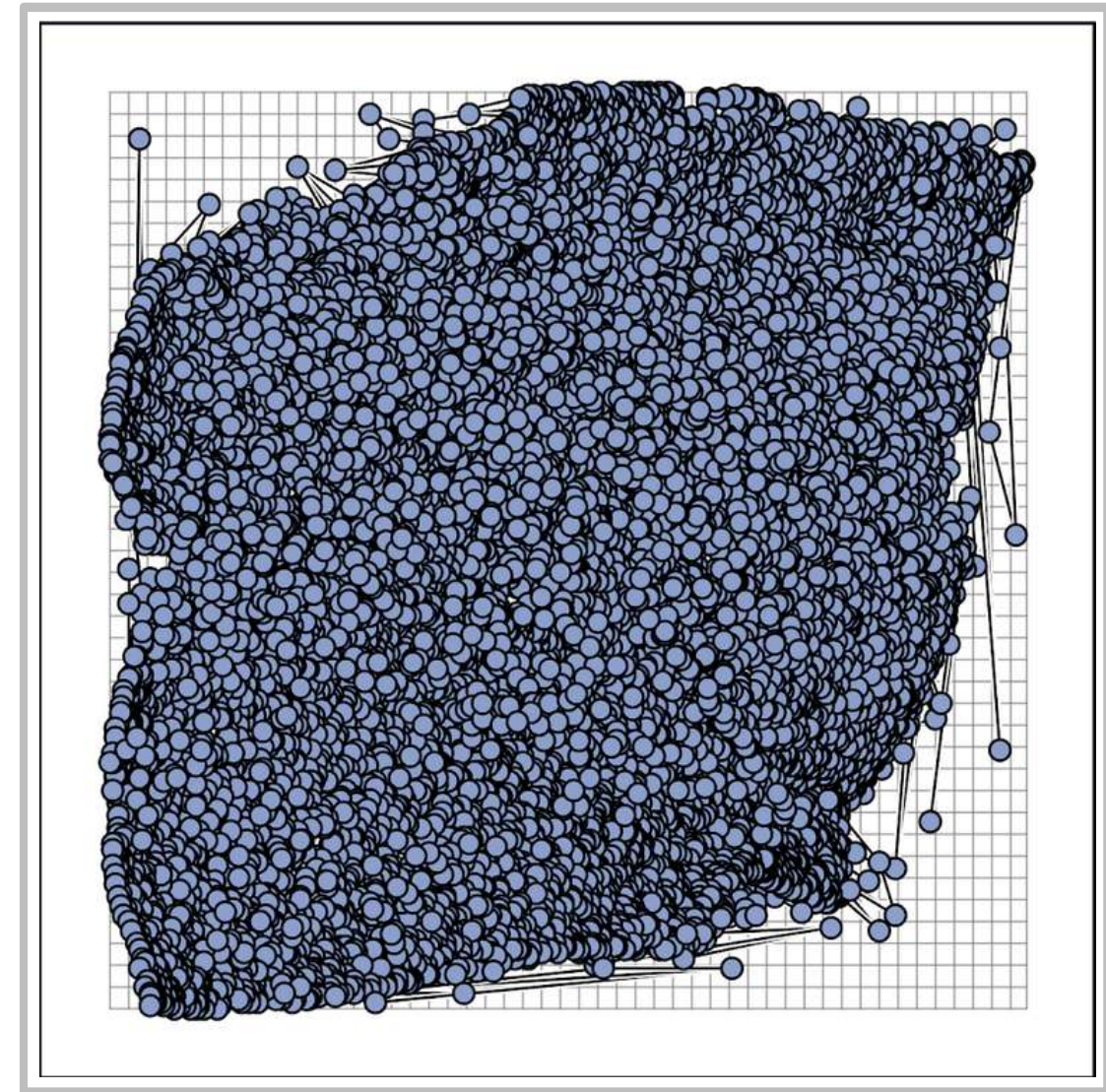
LIVE CHALLENGE

Automatic category graphs



input

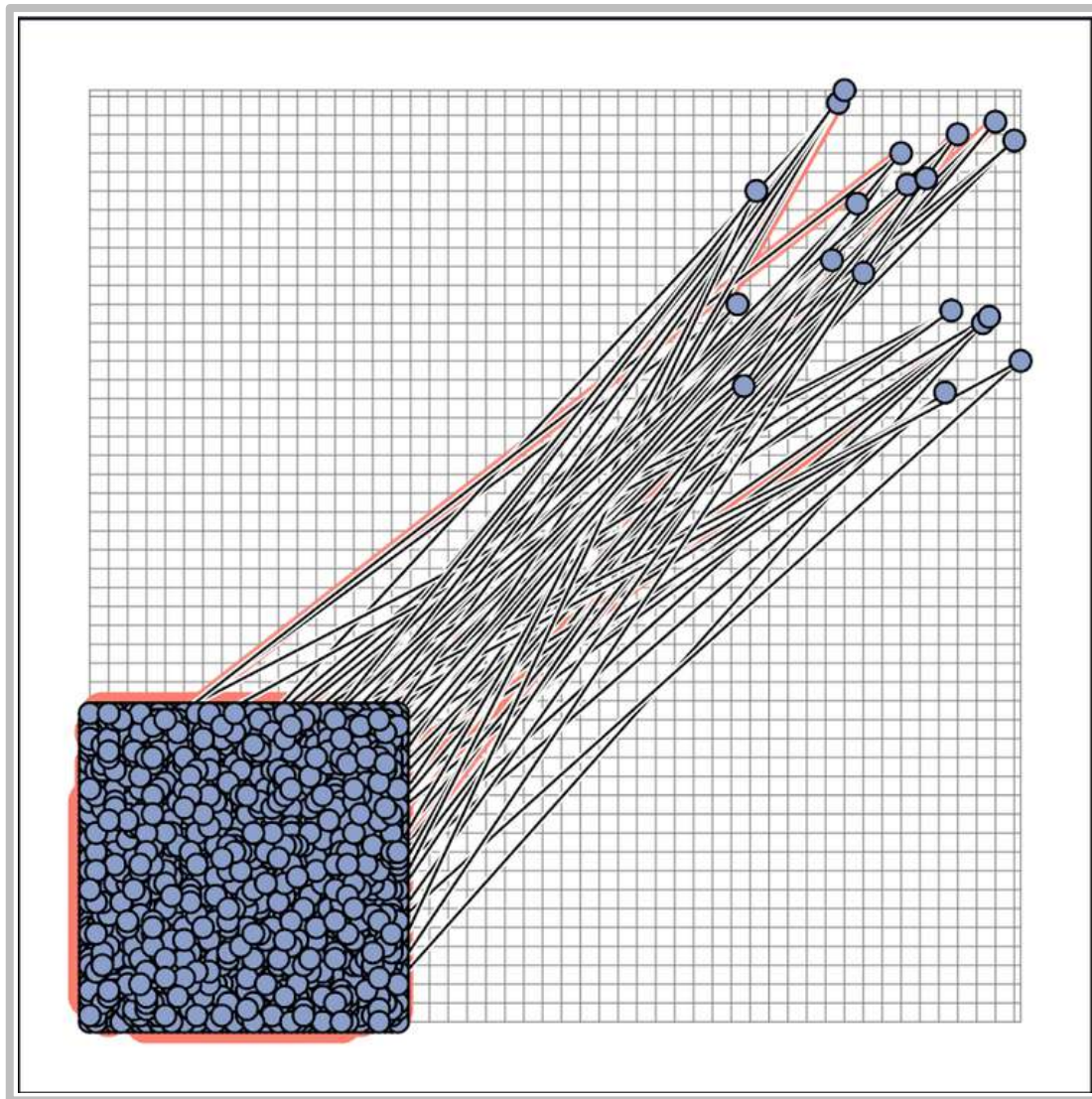
graph 8



best automatic
OMEGA
15-planar

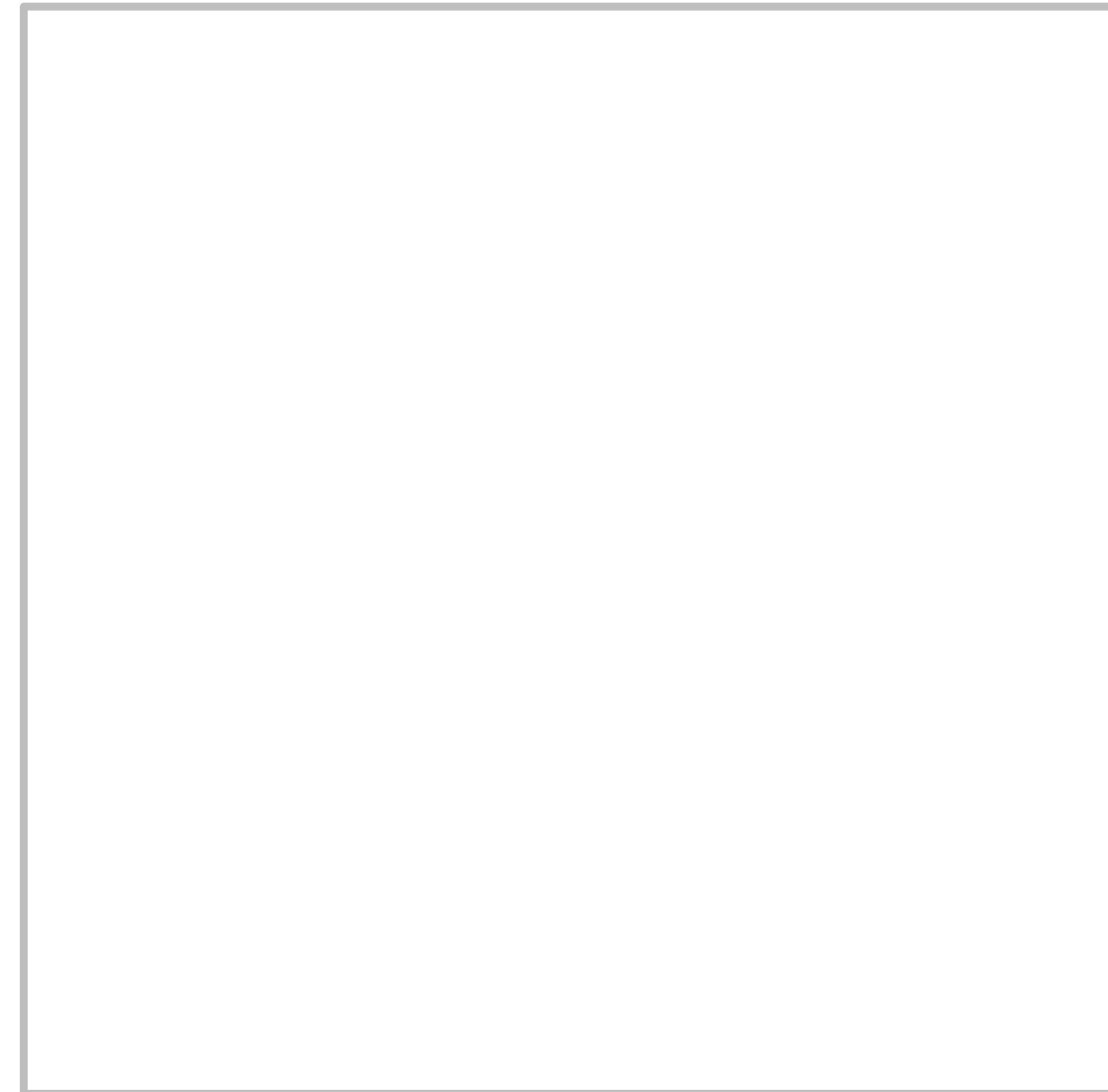
LIVE CHALLENGE

Automatic category graphs



input

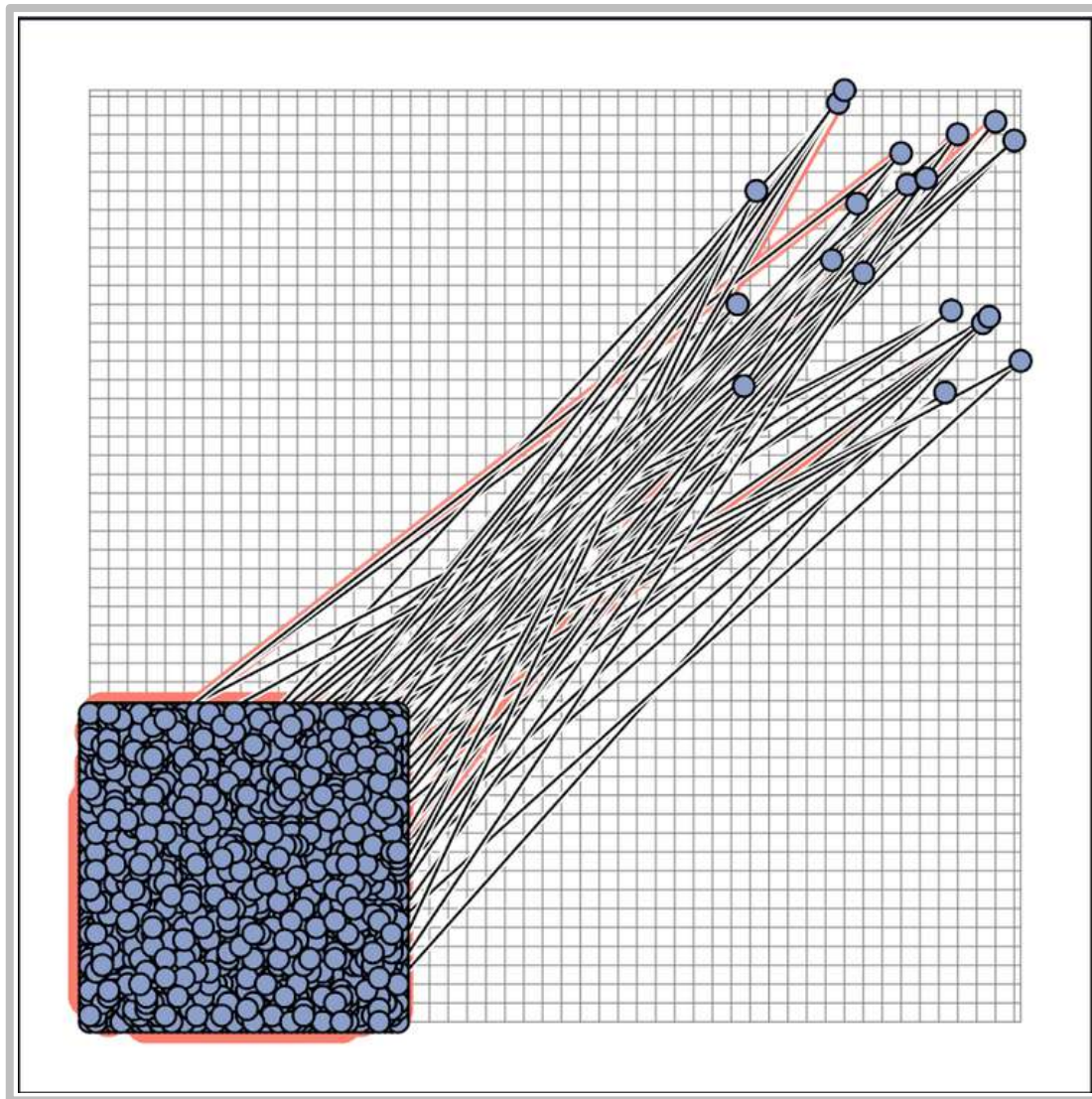
graph 9



best automatic

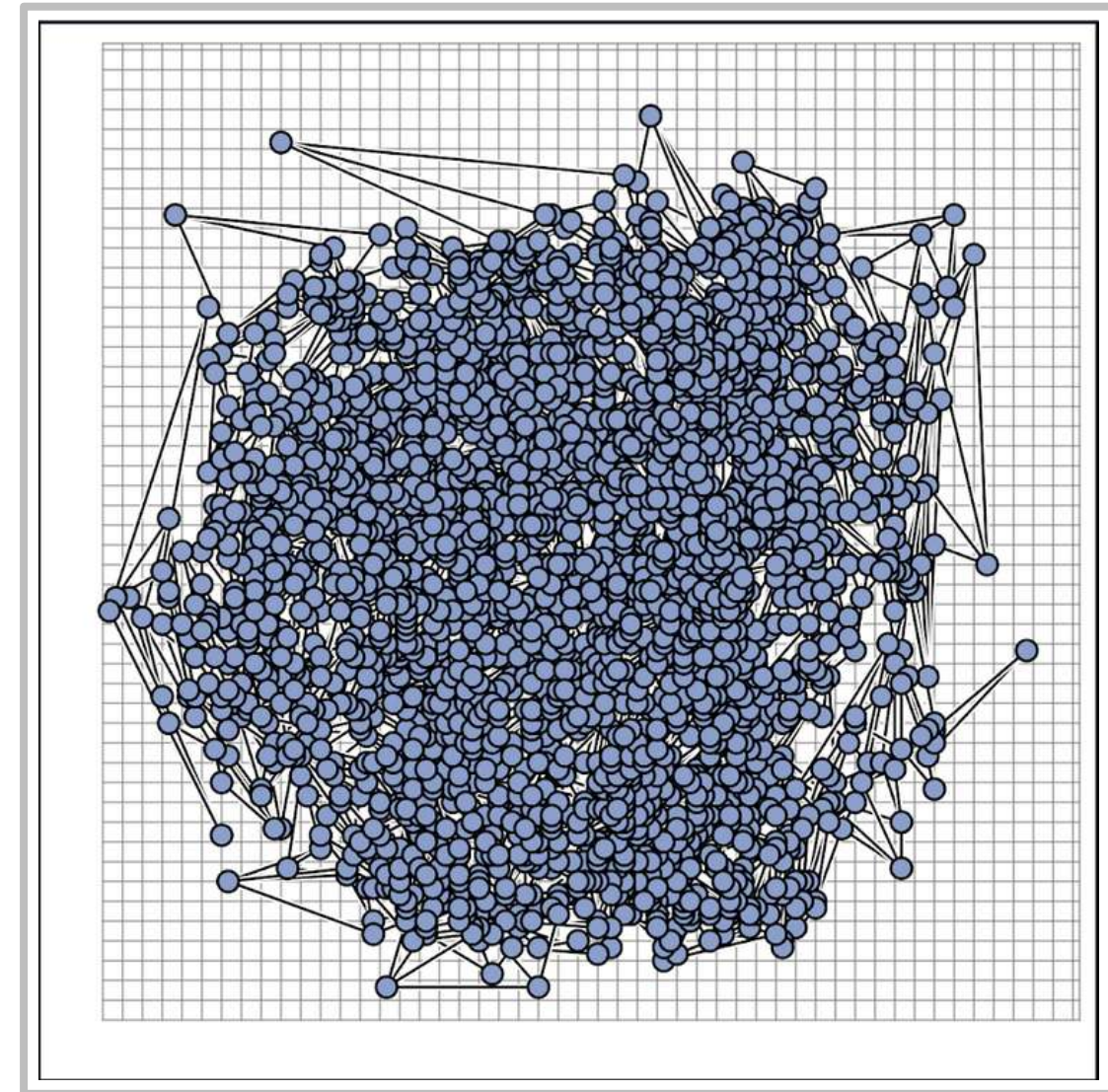
LIVE CHALLENGE

Automatic category graphs



input

graph **9**



best automatic
OMEGA
12-planar

LIVE CHALLENGE

Automatic category

LIVE CHALLENGE

Automatic category

The Scores in Category Automatic

The contest will end in 14 minutes, and 33 seconds!

Live Standings

PLACE	TEAM	SCORE
1	OMEGA	7.942917093528437
2	Christoph	7.119821486732378
3	TUW-Team-2	4.2491195175694125
4	ChadGPT	3.5706771776825064
5	Vienna-Team-4	2.752669381058528
6	HN	2.6920452349694535
7	TUW-Team-3	2.164991696784407

LIVE CHALLENGE

Automatic category

graph

ChadGPT

HN

TUW-Team-3

Christoph

TUW-Team-2

randomteam

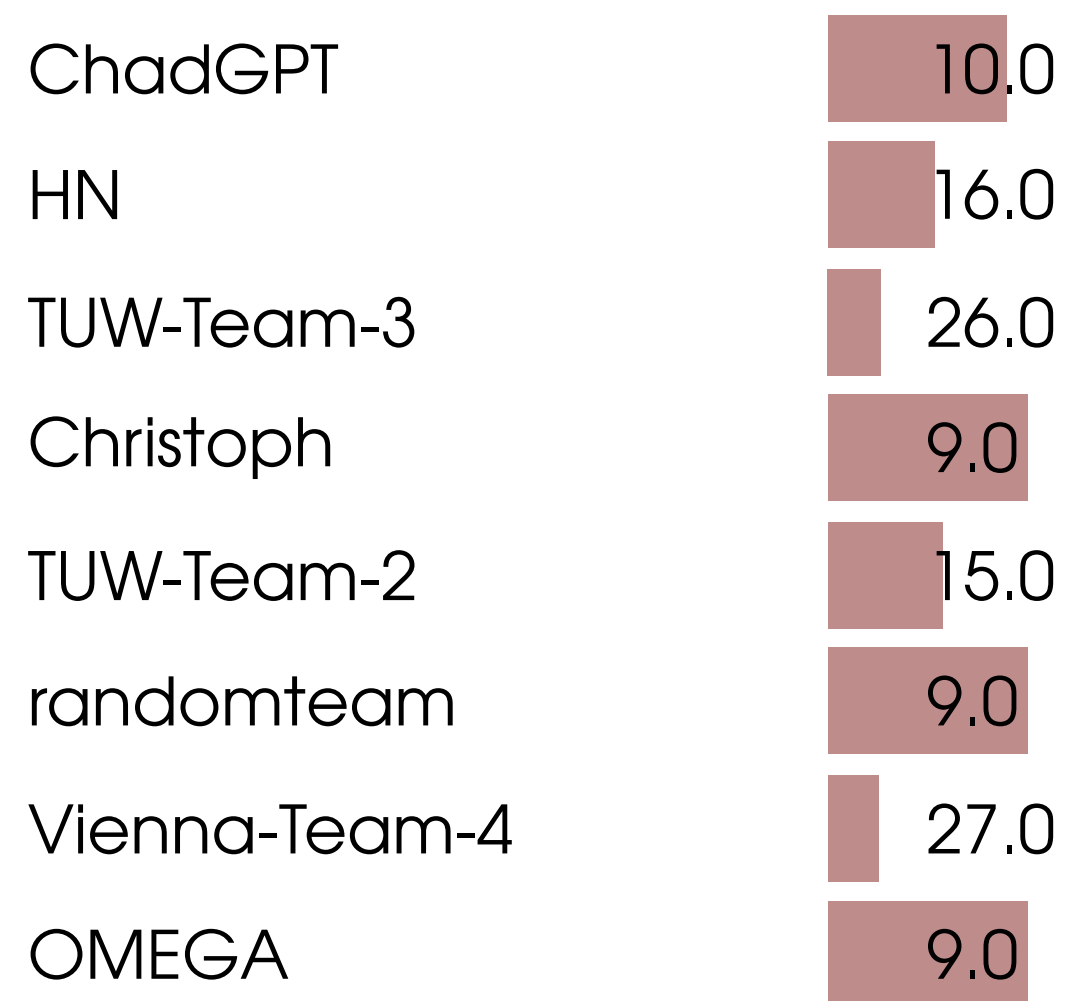
Vienna-Team-4

OMEGA

LIVE CHALLENGE

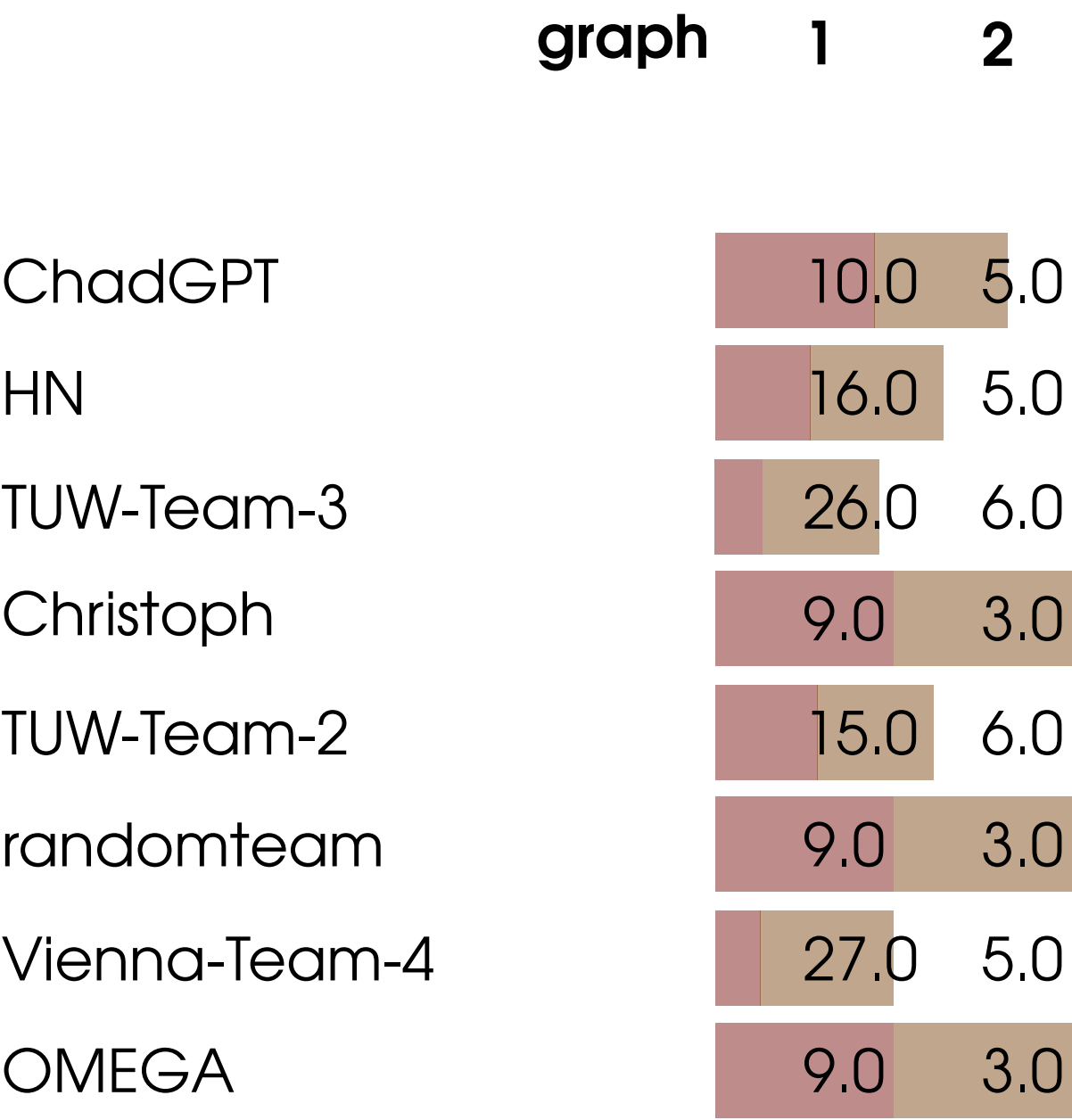
Automatic category

graph 1



LIVE CHALLENGE

Automatic category



LIVE CHALLENGE

Automatic category

	graph	1	2	3
ChadGPT		10.0	5.0	53.0
HN		16.0	5.0	82.0
TUW-Team-3		26.0	6.0	76.0
Christoph		9.0	3.0	40.0
TUW-Team-2		15.0	6.0	93.0
randomteam		9.0	3.0	43.0
Vienna-Team-4		27.0	5.0	80.0
OMEGA		9.0	3.0	34.0

LIVE CHALLENGE

Automatic category

	graph	1	2	3	4
ChadGPT		10.0	5.0	53.0	11.0
HN		16.0	5.0	82.0	13.0
TUW-Team-3		26.0	6.0	76.0	15.0
Christoph		9.0	3.0	40.0	7.0
TUW-Team-2		15.0	6.0	93.0	17.0
randomteam		9.0	3.0	43.0	8.0
Vienna-Team-4		27.0	5.0	80.0	28.0
OMEGA		9.0	3.0	34.0	6.0

LIVE CHALLENGE

Automatic category

	graph	1	2	3	4	5
ChadGPT		10.0	5.0	53.0	11.0	128.0
HN		16.0	5.0	82.0	13.0	129.0
TUW-Team-3		26.0	6.0	76.0	15.0	547.0
Christoph		9.0	3.0	40.0	7.0	81.0
TUW-Team-2		15.0	6.0	93.0	17.0	114.0
randomteam		9.0	3.0	43.0	8.0	85.0
Vienna-Team-4		27.0	5.0	80.0	28.0	146.0
OMEGA		9.0	3.0	34.0	6.0	76.0

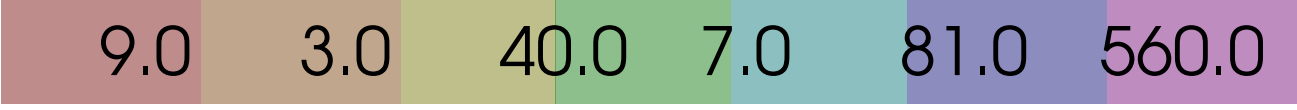
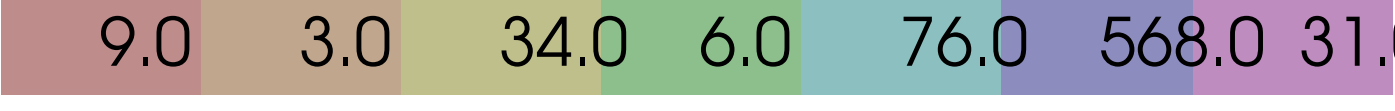
LIVE CHALLENGE

Automatic category

	graph	1	2	3	4	5	6
ChadGPT		10.0	5.0	53.0	11.0	128.0	1089.0
HN		16.0	5.0	82.0	13.0	129.0	1186.0
TUW-Team-3		26.0	6.0	76.0	15.0	547.0	1394.0
Christoph		9.0	3.0	40.0	7.0	81.0	560.0
TUW-Team-2		15.0	6.0	93.0	17.0	114.0	1291.0
randomteam		9.0	3.0	43.0	8.0	85.0	1081.0
Vienna-Team-4		27.0	5.0	80.0	28.0	146.0	1220.0
OMEGA		9.0	3.0	34.0	6.0	76.0	568.0

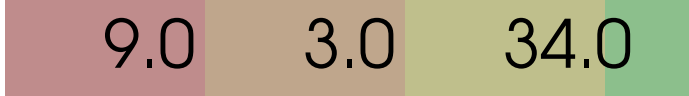
LIVE CHALLENGE

Automatic category

	graph	1	2	3	4	5	6	7
ChadGPT		10.0	5.0	53.0	11.0	128.0	1089.0	116.0
HN		16.0	5.0	82.0	13.0	129.0	1186.0	118.0
TUW-Team-3		26.0	6.0	76.0	15.0	547.0	1394.0	160.0
Christoph		9.0	3.0	40.0	7.0	81.0	560.0	32.0
TUW-Team-2		15.0	6.0	93.0	17.0	114.0	1291.0	75.0
randomteam		9.0	3.0	43.0	8.0	85.0	1081.0	40.0
Vienna-Team-4		27.0	5.0	80.0	28.0	146.0	1220.0	62.0
OMEGA		9.0	3.0	34.0	6.0	76.0	568.0	31.0

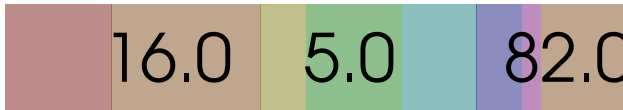
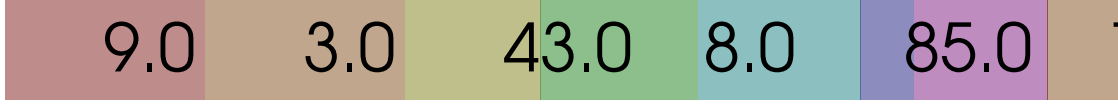
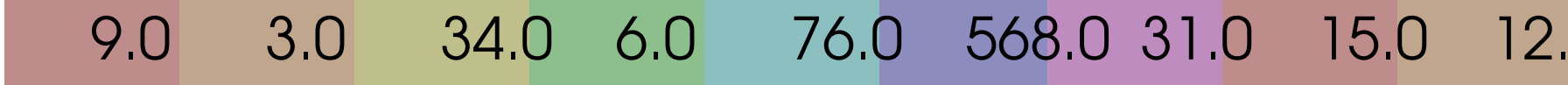
LIVE CHALLENGE

Automatic category

	graph	1	2	3	4	5	6	7	8
ChadGPT		10.0	5.0	53.0	11.0	128.0	1089.0	116.0	
HN		16.0	5.0	82.0	13.0	129.0	1186.0	118.0	
TUW-Team-3		26.0	6.0	76.0	15.0	547.0	1394.0	160.0	770.0
Christoph		9.0	3.0	40.0	7.0	81.0	560.0	32.0	-3.0
TUW-Team-2		15.0	6.0	93.0	17.0	114.0	1291.0	75.0	20.0
randomteam		9.0	3.0	43.0	8.0	85.0	1081.0	40.0	-3.0
Vienna-Team-4		27.0	5.0	80.0	28.0	146.0	1220.0	62.0	29.0
OMEGA		9.0	3.0	34.0	6.0	76.0	568.0	31.0	15.0

LIVE CHALLENGE

Automatic category

	graph	1	2	3	4	5	6	7	8	9
ChadGPT		10.0	5.0	53.0	11.0	128.0	1089.0	116.0		2524.0
HN		16.0	5.0	82.0	13.0	129.0	1186.0	118.0		23.0
TUW-Team-3		26.0	6.0	76.0	15.0	547.0	1394.0	160.0	770.0	32.0
Christoph		9.0	3.0	40.0	7.0	81.0	560.0	32.0	-3.0	21.0
TUW-Team-2		15.0	6.0	93.0	17.0	114.0	1291.0	75.0	20.0	22.0
randomteam		9.0	3.0	43.0	8.0	85.0	1081.0	40.0	-3.0	26.0
Vienna-Team-4		27.0	5.0	80.0	28.0	146.0	1220.0	62.0	29.0	16.0
OMEGA		9.0	3.0	34.0	6.0	76.0	568.0	31.0	15.0	12.0

LIVE CHALLENGE

Automatic category

	graph	1	2	3	4	5	6	7	8	9
ChadGPT		10.0	5.0	53.0	11.0	128.0	1089.0	116.0		2524.0
HN		16.0	5.0	82.0	13.0	129.0	1186.0	118.0		23.0
 Stefan Brandmair & Luca Marius Cobzaru <i>randomteam</i>										
randomteam		9.0	3.0	43.0	8.0	85.0	1081.0	40.0	-3.0	26.0
Vienna-Team-4		27.0	5.0	80.0	28.0	146.0	1220.0	62.0	29.0	16.0
OMEGA		9.0	3.0	34.0	6.0	76.0	568.0	31.0	15.0	12.0

LIVE CHALLENGE

Automatic category

	graph	1	2	3	4	5	6	7	8	9
Chad GPT		10.0	5.0	53.0	11.0	100.0	1000.0	114.0	2504.0	
 Christoph Weber <i>Christoph</i>										
Christoph		9.0	3.0	40.0	7.0	81.0	560.0	32.0	-3.0	21.0
TUW-Team-2		15.0	6.0	93.0	17.0	114.0	1291.0	75.0	20.0	22.0
randomteam		9.0	3.0	43.0	8.0	85.0	1081.0	40.0	-3.0	26.0
Vienna-Team-4		27.0	5.0	80.0	28.0	146.0	1220.0	62.0	29.0	16.0
OMEGA		9.0	3.0	34.0	6.0	76.0	568.0	31.0	15.0	12.0

LIVE CHALLENGE

Automatic category

graph 1 2 3 4 5 6 7 8 9

 Julien Bianchetti & Laurent Moalic <i>OMEGA</i>										
TUW-Team-3	26.0	6.0		76.0	15.0	547.0	1394.0	160.0	770.0	32.0
Christoph	9.0	3.0	40.0	7.0	81.0	560.0	32.0	-3.0	21.0	
TUW-Team-2	15.0	6.0		93.0	17.0	114.0	1291.0	75.0	20.0	22.0
randomteam	9.0	3.0	43.0	8.0	85.0		1081.0	40.0	-3.0	26.0
Vienna-Team-4	27.0	5.0	80.0	28.0	146.0	1220.0	62.0	29.0	16.0	
OMEGA	9.0	3.0	34.0	6.0	76.0	568.0	31.0	15.0	12.0	

GRAPH DRAWING CONTEST

2025 Announcement

Announcement of Topics

GRAPH DRAWING CONTEST

2025 Live Challenge

Compute k -planar drawings

- input: a graph G
- output: k -planar straight-line drawing of G
- objective: minimize k

GRAPH DRAWING CONTEST

2025 Live Challenge

Compute k -planar drawings

- input: a graph G
- output: k -planar straight-line drawing of G
- objective: minimize k

Session 1, 09:15 — 10:30	Chair: Philipp Kinderman, Hemerycksalen ▼
09:15 — 09:35	Tatsuya Gima, Yasuaki Kobayashi and <u>Yuto Okada</u> . Structural Parameterizations of k -Planarity [T1]
09:35 — 09:55	Hugo Akitaya, Justin Dallant, Erik D. Demaine, <u>Michael Kaufmann</u> , Linda Kleist, Frederick Stock, Csaba Toth and Torsten Ueckerdt. Connectivity Augmentation for Planar and Beyond-Planar Graphs [T1]
09:55 — 10:15	Simon D. Fink, Miriam Münch, <u>Matthias Pfretzschner</u> and Ignaz Rutter. Heuristics for Exact 1-Planarity Testing [T2]
10:15 — 10:30	<u>Eliska Cervenкова</u> and Jan Kratochvíl. 1-planar unit distance graphs with more edges than matchstick graphs [S]

GRAPH DRAWING CONTEST

2025 Creative Challenge

Stay tuned!

GRAPH DRAWING CONTEST

2025 Announcement

Committee
Announcement

GRAPH DRAWING CONTEST

2025 Announcement

Committee Announcement

Sara and Jules are new
co-chairs of the committee