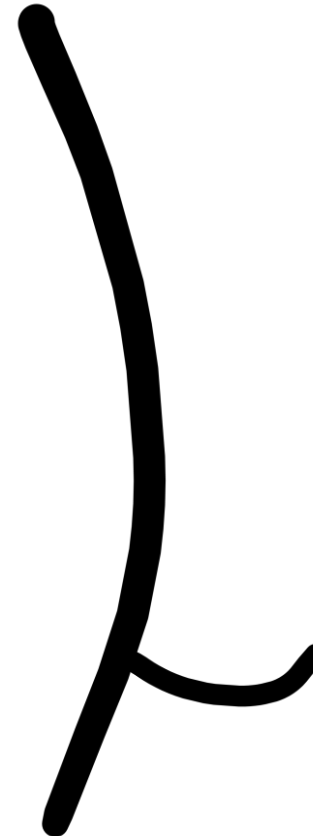
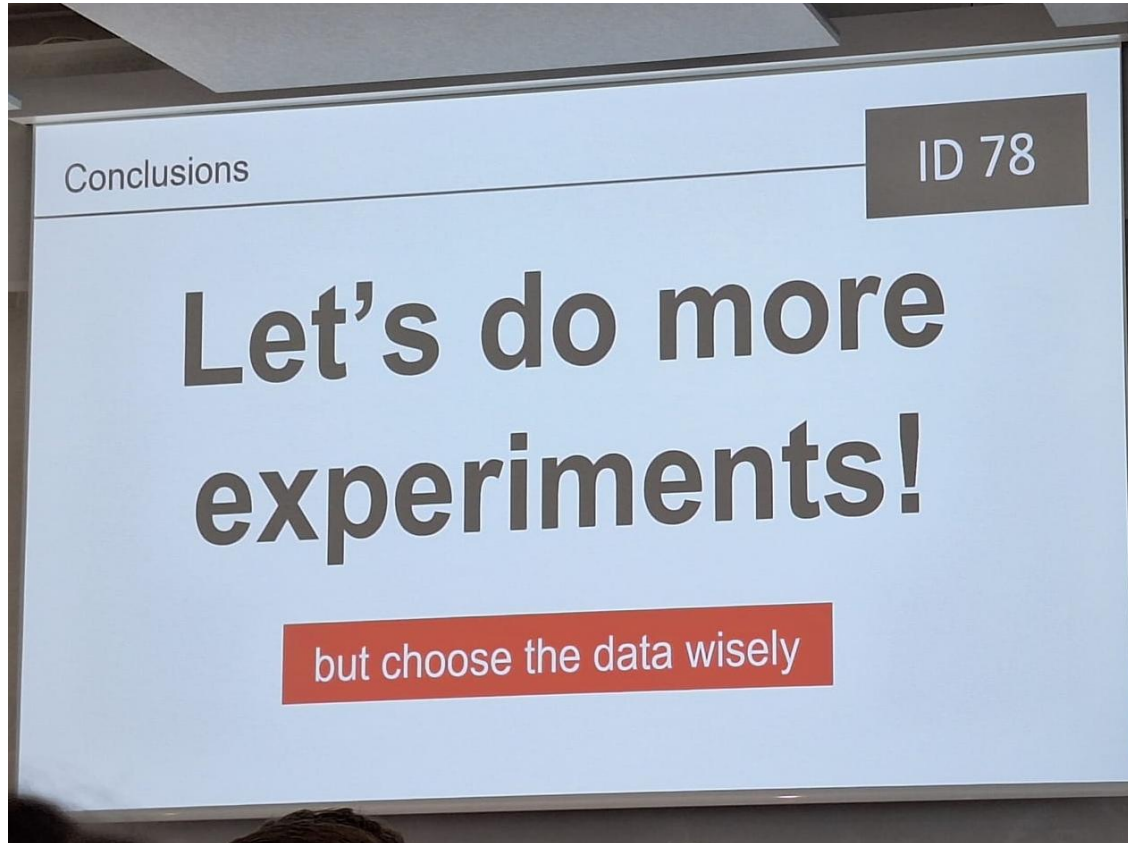
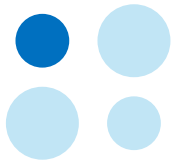
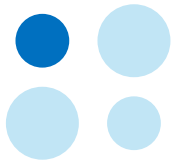


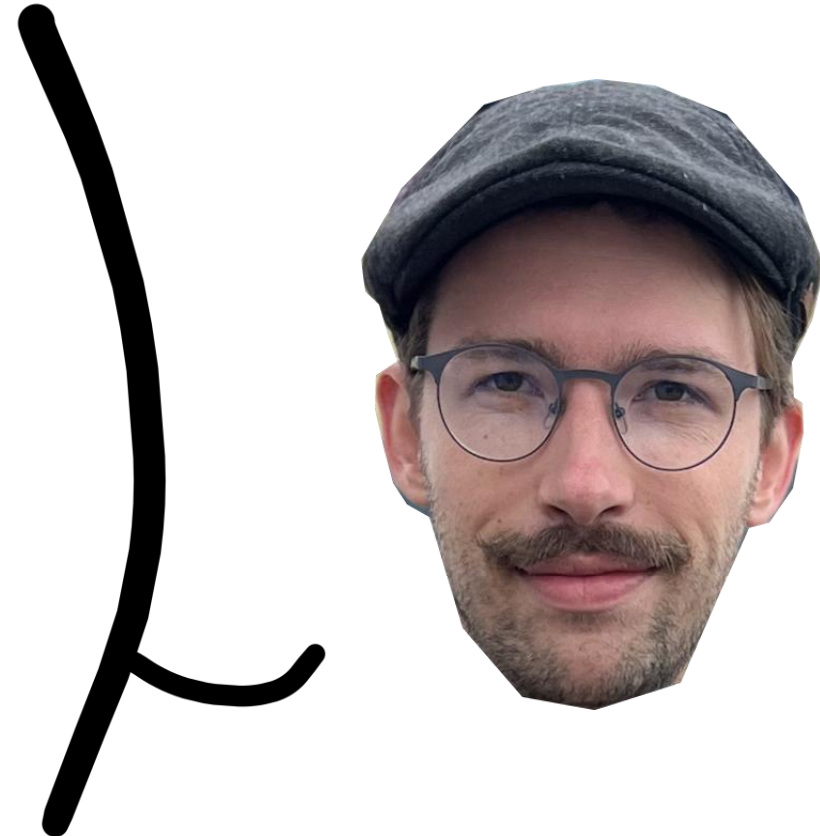
Twenty Years of Voting Experiments during French Presidential Elections

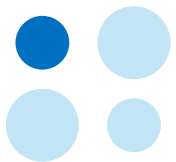
Théo Delemazure
ILLC, University of Amsterdam



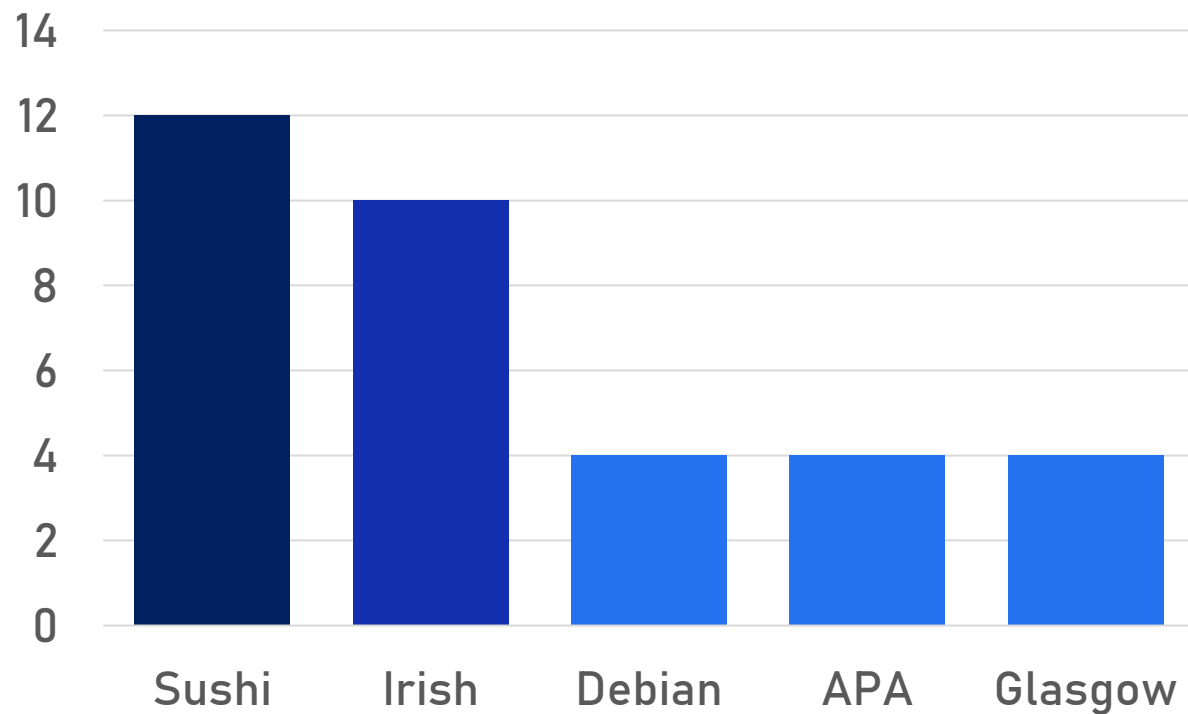


There is a lack of
approval datasets
(besides Pabulib)

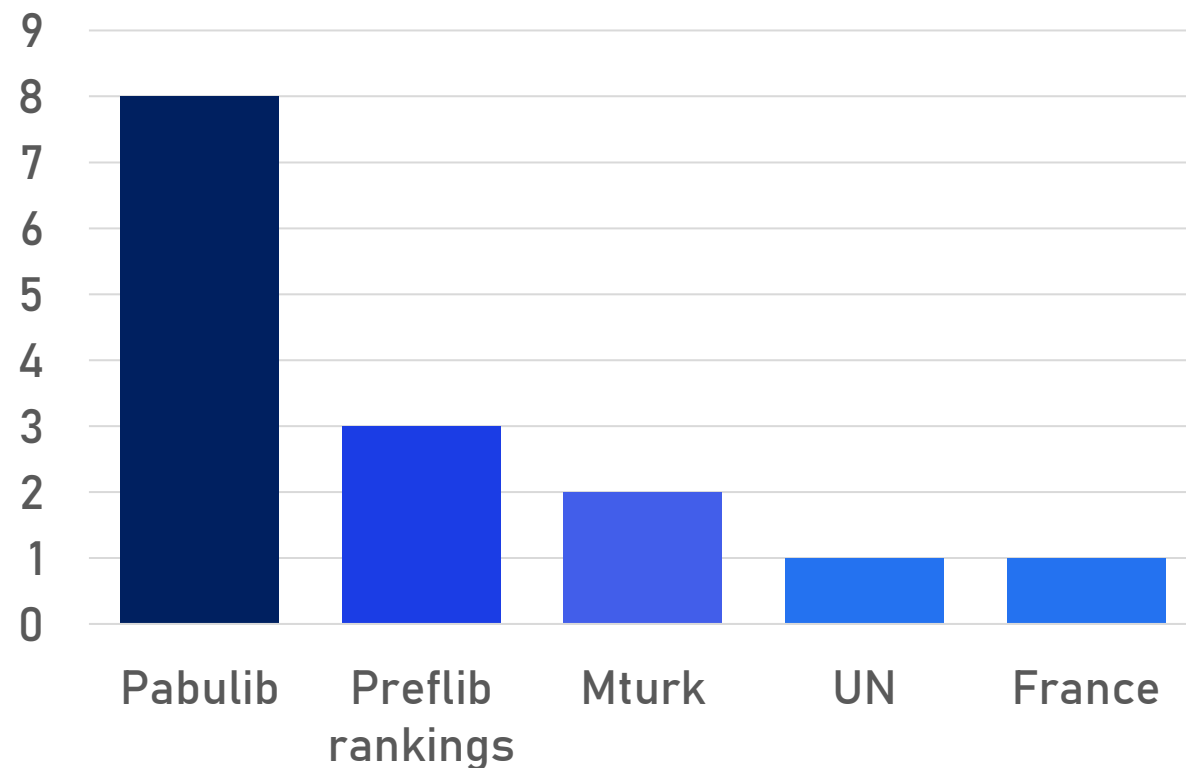




Ordinal

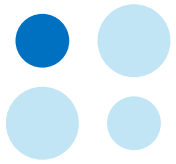


Approval



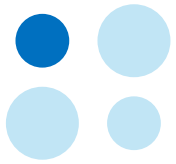
Number of papers using each dataset (from *“the guide”* database)

5 most used only



Introduction

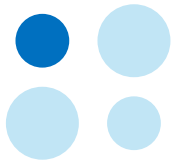
The secret goal of COMSOC



Introduction

The secret goal of COMSOC

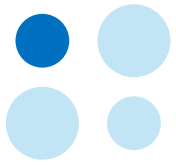




Introduction

The secret goal of COMSOC

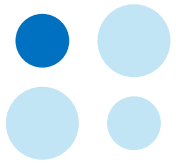




Introduction

The secret goal of COMSOC

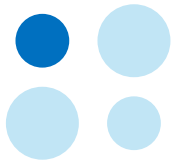




Introduction

The secret goal of COMSOC





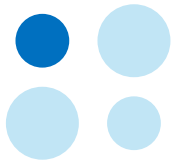
Introduction

The secret goal of COMSOC



**of course all the food here is vegetarian (this is fish-looking tofu)*





Datasets of approval and ordinal preferences collected in parallel to French presidential elections



20 years

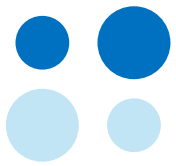
6 presidential elections

12 experiments

17 fields + 5 online samples

80 000 voters (233 – 37 462)

Voting experiments



When?

The 2002 French presidential election.

Who?

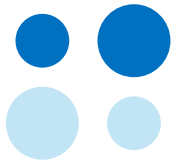
Michel Balinski, Rida Laraki, Jean-François Laslier and Karine Van der Straeten.

Where?

In two French cities (Orsay and Gy-les-nonains).

What?

A field experiment on *approval voting*.



In parallel to an actual election.



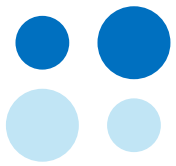
Test alternative voting methods.



Use the same candidates as in the actual election.

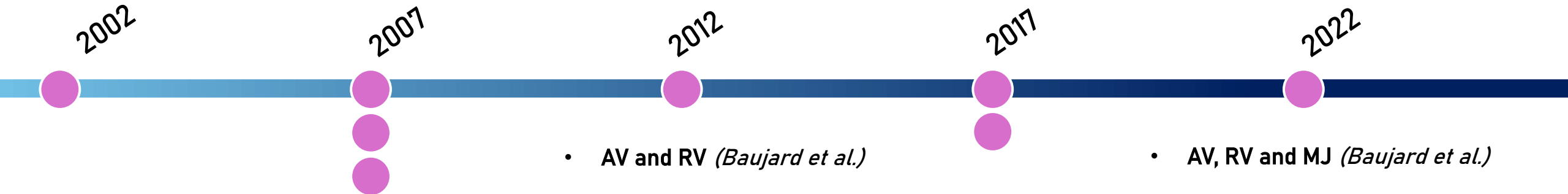


Lab experiments



- AV and RV (*Baujard and Igersheim*)
- Majority Judgement (*Balinski and Laraki*)
- IRV (*Favarque et al.*)

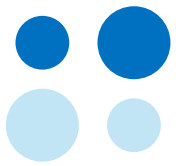
- AV and RV (*Bouveret et al.*)
- IRV and Borda (*Kamwa et al.*)



French presidential elections

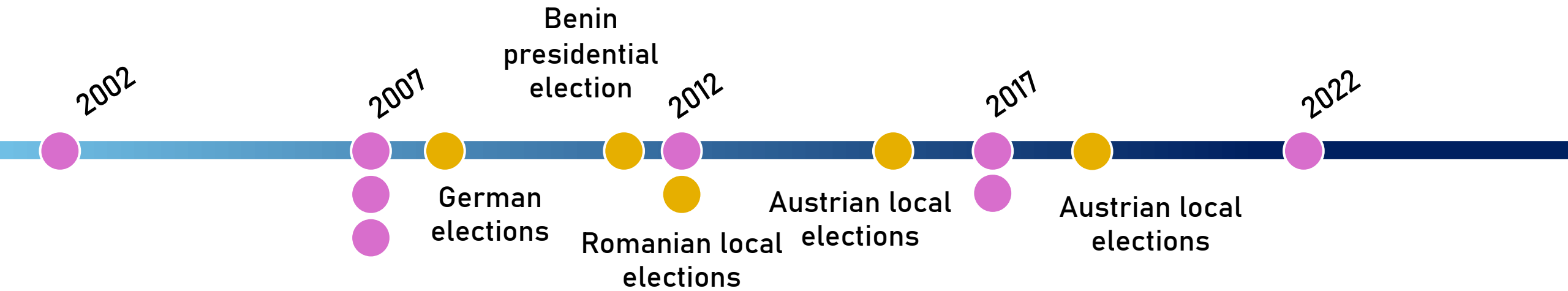


Fields experiments

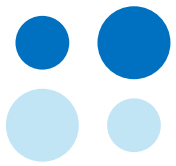


Voting experiments

Timeline

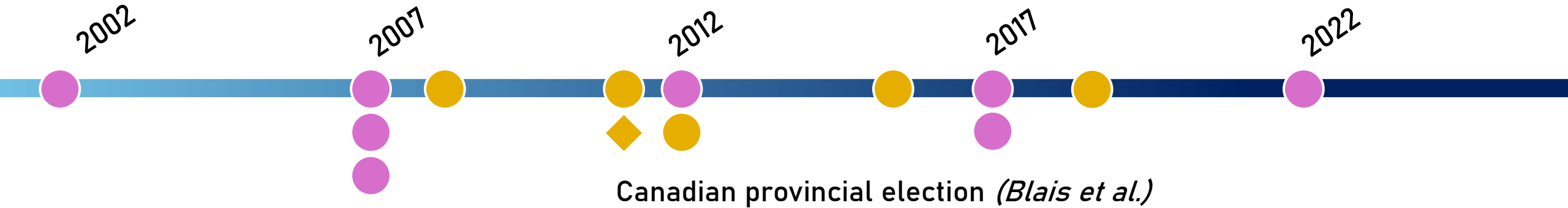


- French presidential elections
- Other elections
- Fields experiments



Voting experiments

Timeline



French presidential elections



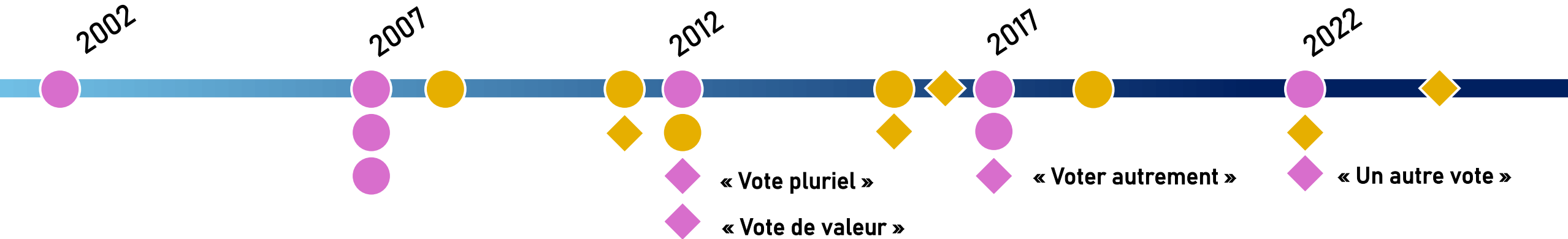
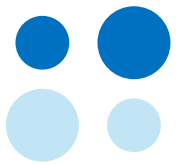
Other elections



Fields experiments



Online experiments



French presidential elections



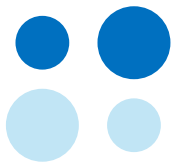
Fields experiments



Other elections

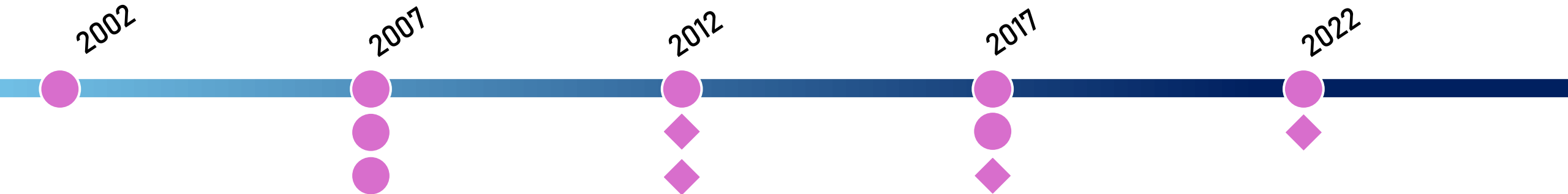


Online experiments



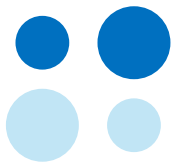
Voting experiments

Timeline



● Fields experiments

◆ Online experiments



Voting experiments

Field VS Online experiments

Field “in situ” experiments

Preparation: convince a city to let you do the experiment and inform the citizens about the experiment by mail.

Recruitment: talk to people at the voting station after they have voted in the election.

- + More representative
- + More serious participants

Online experiments

Preparation: build a website.

Recruitment: share the link to mailing lists/on social media OR pay a poll institute to get a representative sample (expensive).

- + Easier to organize
- + Can potentially gather a lot of participants



The life of an experiment dataset

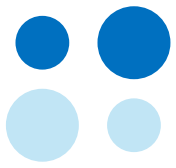


Experiment



Data





Voting experiments

The life of an experiment dataset



Experiment



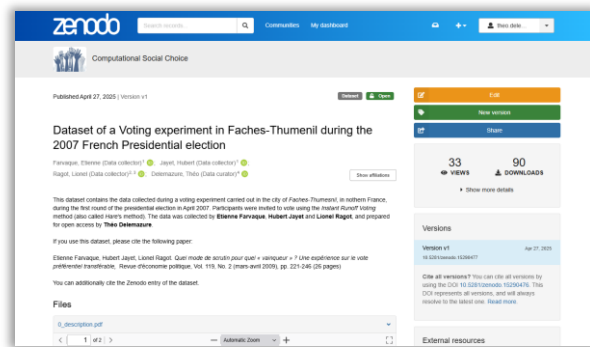
Data



Data
cleaning



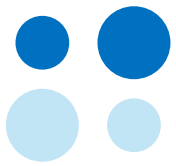
Paper/Report



Open Dataset

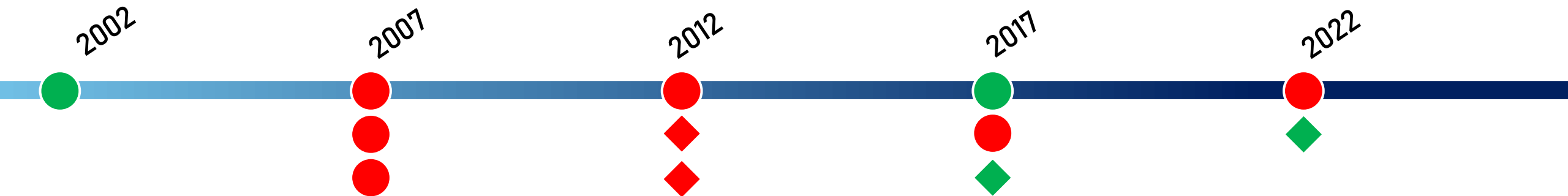


Can be used in
many papers!



Voting experiments

Timeline



Available online



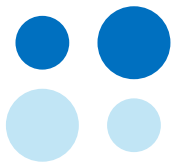
Not available online



Fields experiments

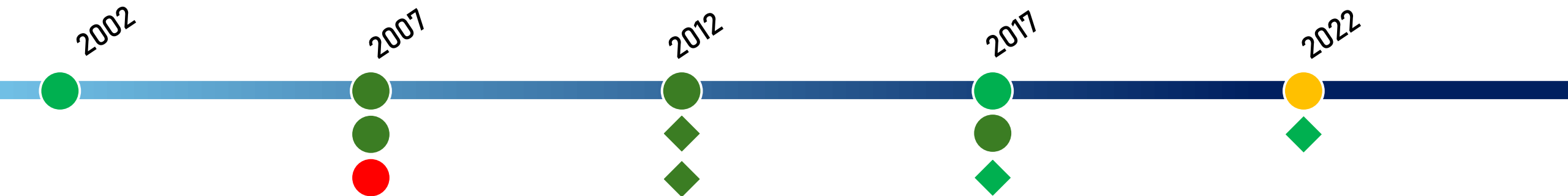


Online experiments



Voting experiments

Timeline



Available online



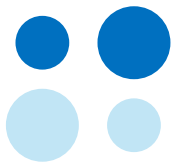
Not available online



Fields experiments

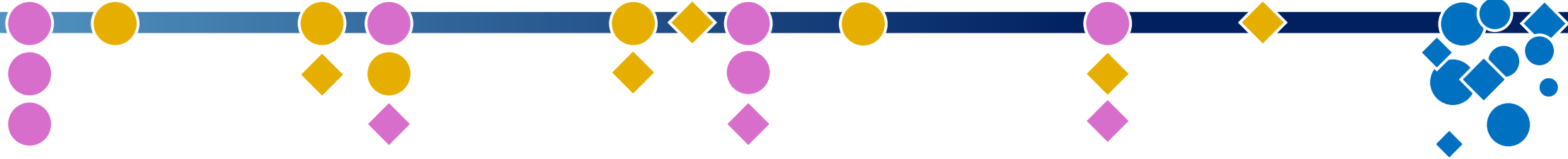


Online experiments



Voting experiments

Organize experiments!

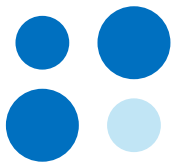


An election is coming up in your country?

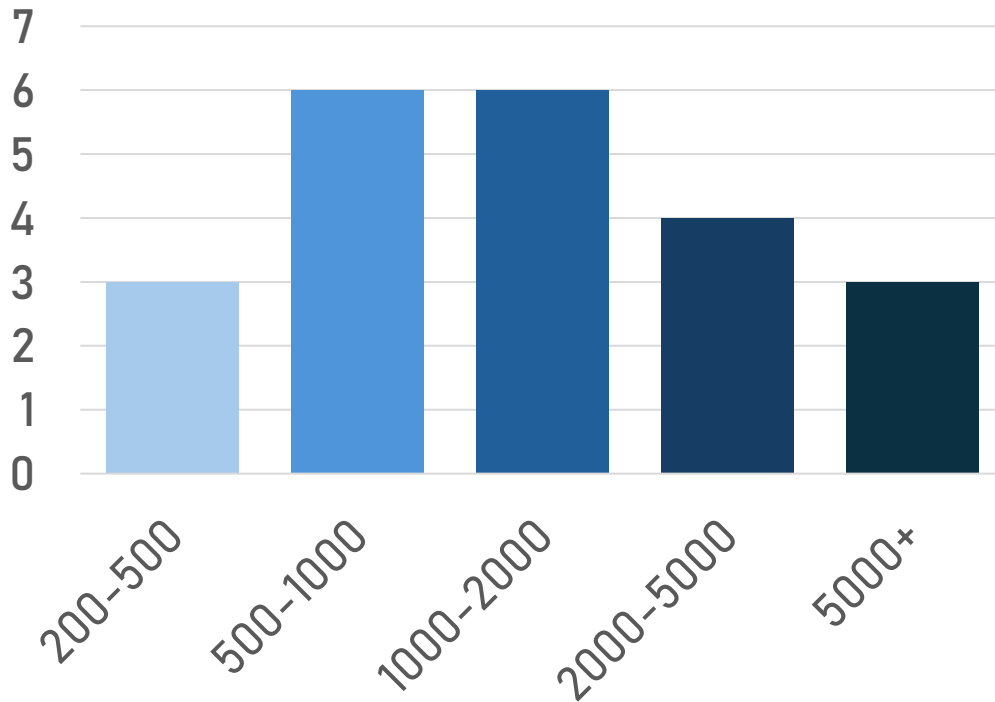
Organize your own experiment!

If you do an online experiment,
I can help with the website!

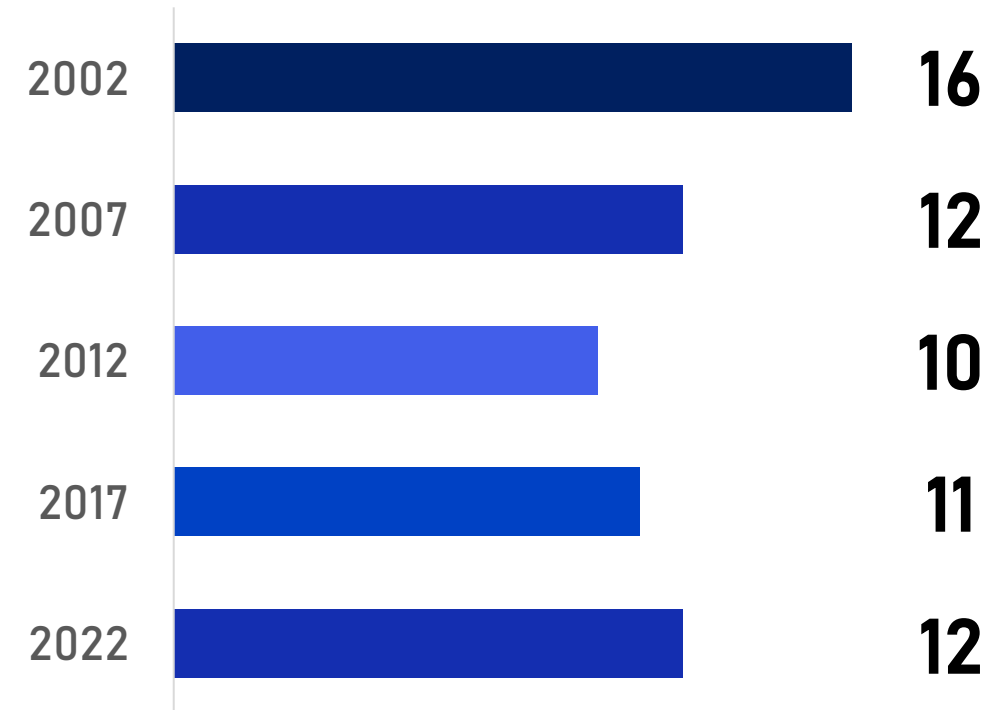
The datasets



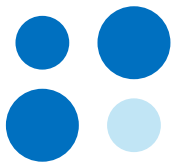
Distribution of the number of voters



Number of candidates in each election



Possibility to merge datasets from the same election.



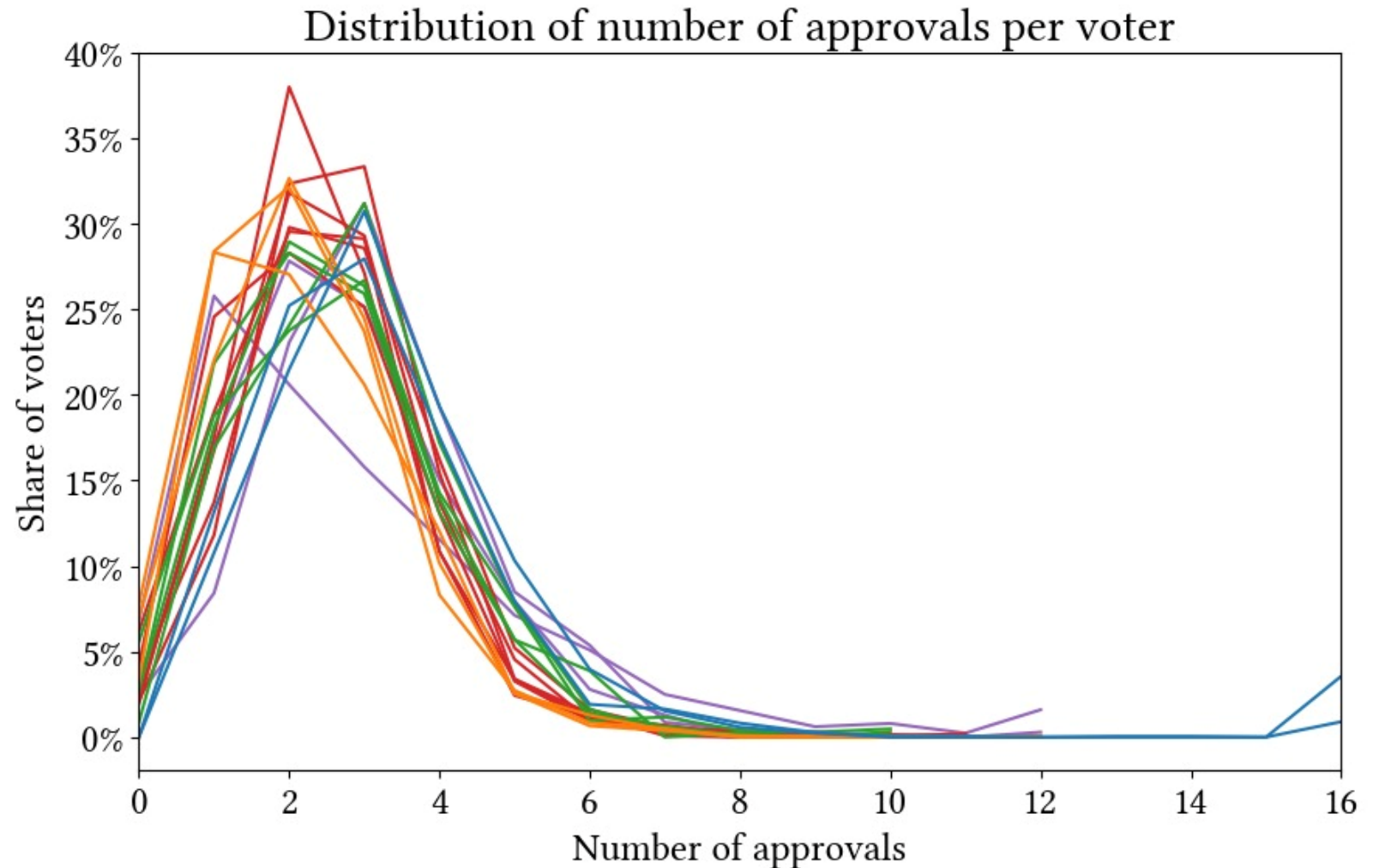
The datasets

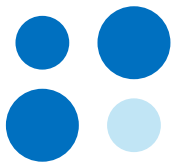
Approval preferences

8 experiments

18 approval profiles

- 2002 (2 profiles)
- 2007 (3 profiles)
- 2012 (4 profiles)
- 2017 (6 profiles)
- 2022 (3 profiles)





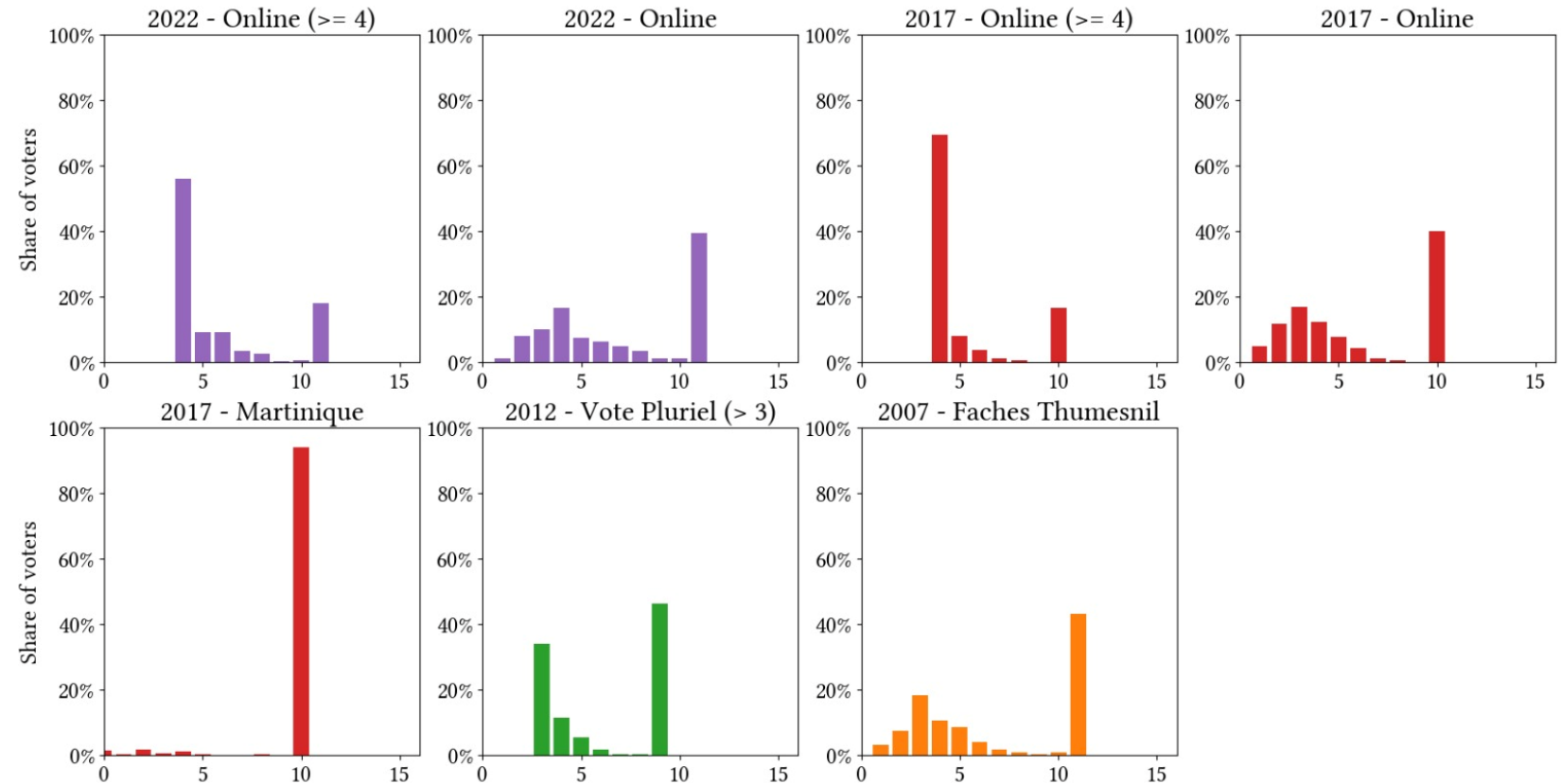
The datasets

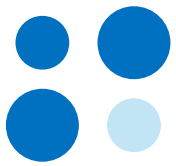
Ordinal preferences

5 experiments

7 ordinal profiles

-  2007 (1 profile)
-  2012 (1 profile)
-  2017 (3 profiles)
-  2022 (2 profiles)





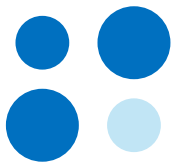
5 experiments

7 ordinal profiles

- 2007 (1 profile)
- 2012 (1 profile)
- 2017 (3 profiles)
- 2022 (2 profiles)

Full rankings only

- Faches-Thumesnil: 370
- Vote Pluriel: 3802
- Martinique: 485
- Online: 5755
- Online: 412



The datasets

Other preference formats

3 “top-4” rankings profiles (for 4-Borda)

26 discrete scores profiles (with various scales)

3 pairwise comparisons profiles

4 appreciation profiles (for Majority Judgement)

3 (quasi-)continuous scores profiles

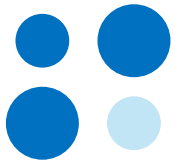
↪ *Grenoble* - put a point on a line from 0 to 1



Anne Hidalgo
Parti Socialiste

☐ À rejeter ☐ Insuffisant ☐ Passable
☐ Assez bien ☒ Bien ☐ Très bien ☐ Excellent





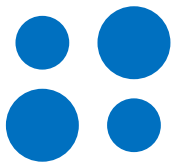
Socio-demographic info (age, education level, job, location,...)

Actual vote at the election (with various scales)

Opinion on alternative voting methods

Personal questions (interest in politics, self alignment from left to right, etc.)

Using the data



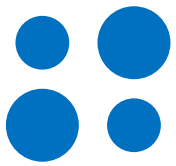
Using this data

Reweighting the data

4% of participants in **our sample** voted for Marine Le Pen **+** 20% of voters in **the election** voted for Marine Le Pen **→** Participants who voted for Marine Le Pen have **weight 5**



If you use a subsample of the full datasets (e.g., only full rankings), the **weights need to be recomputed**.



Using this data

Inter-format analysis

(2017 Online Dataset)

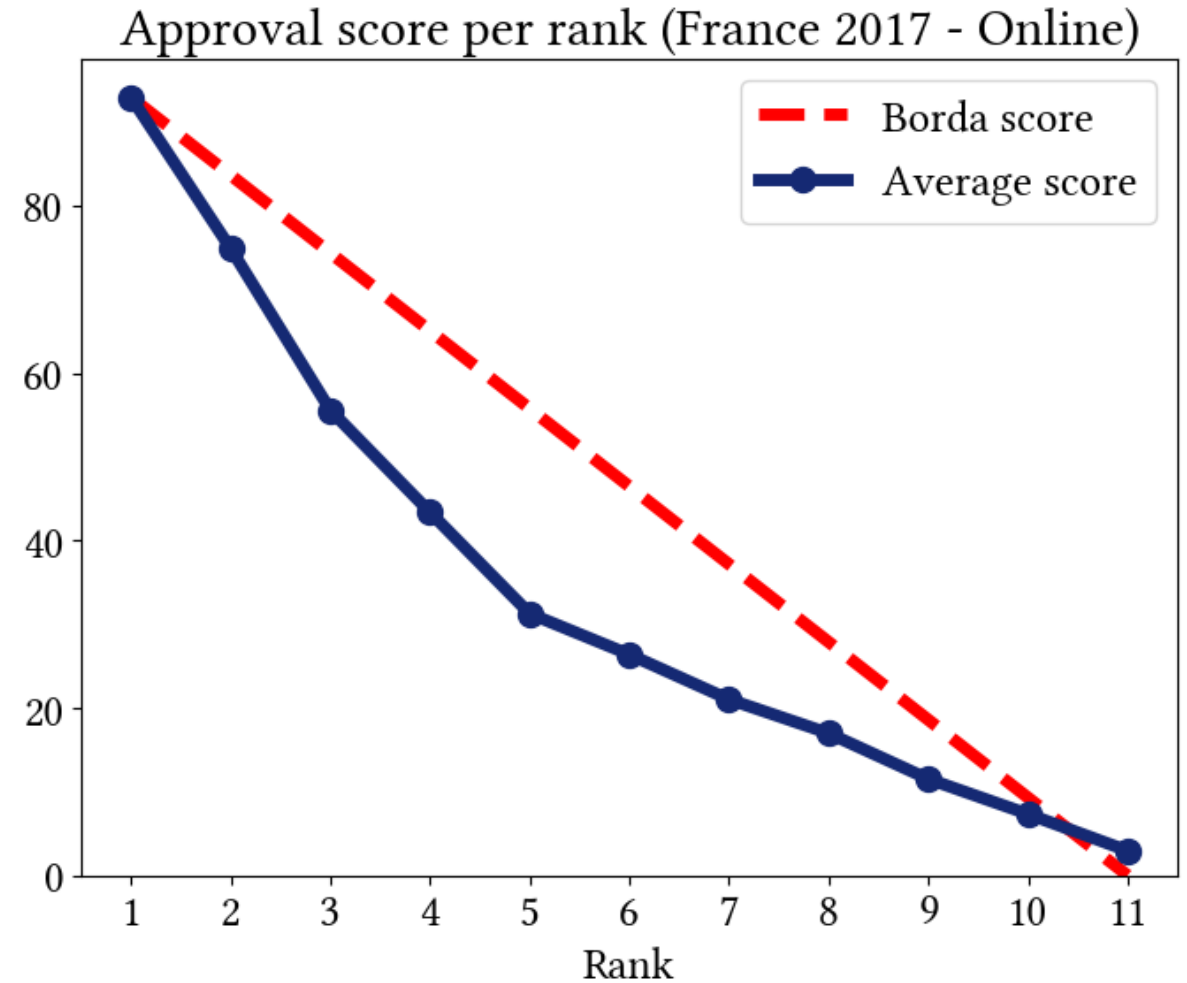
Full rankings

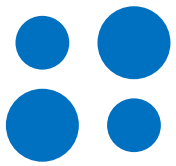


Continuous opinion



Score from 0 to 100
(Default is 50)





Using this data

Inter-format analysis

(2017 Online Dataset)

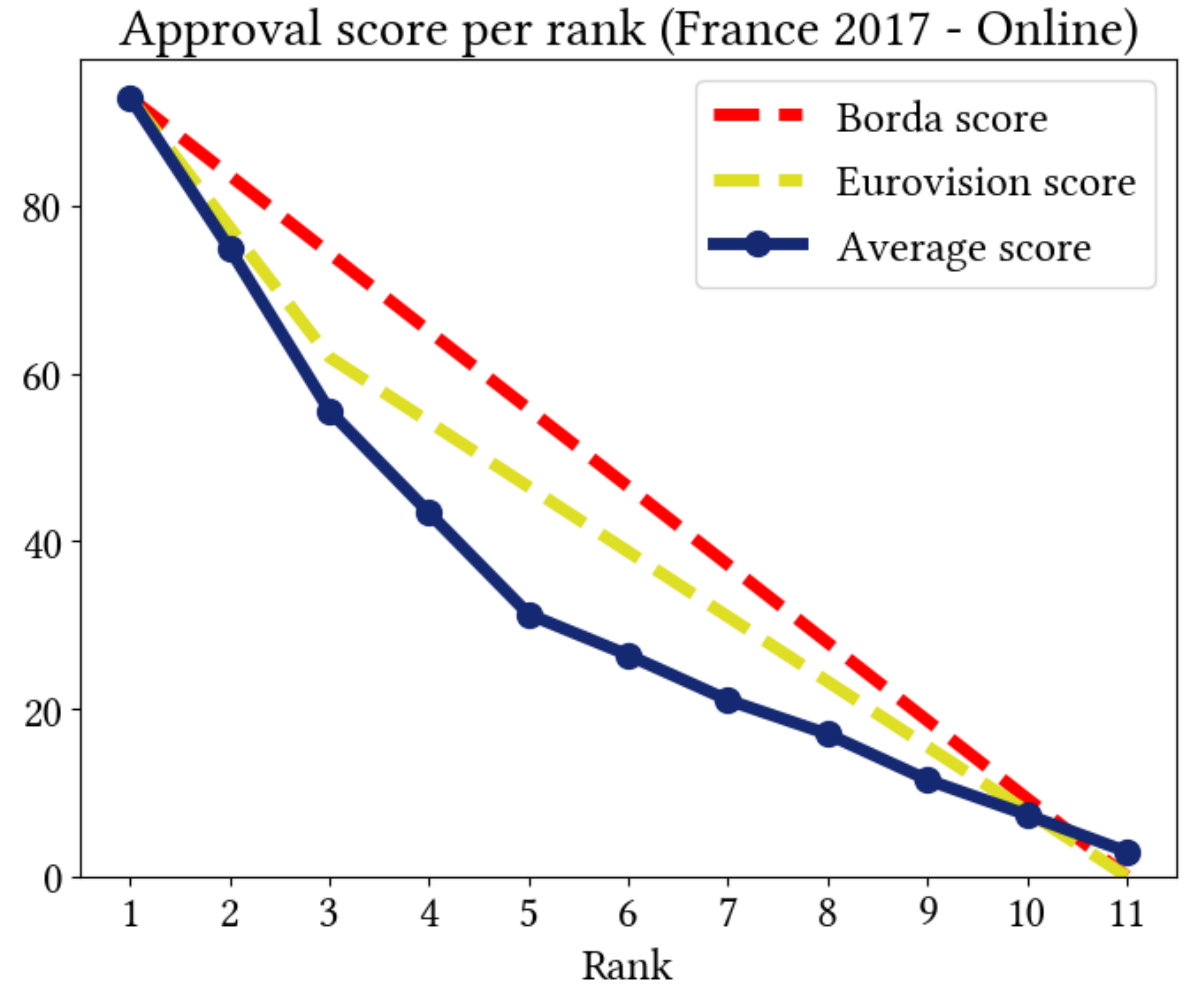
Full rankings

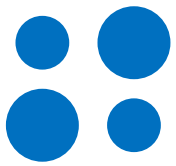


Continuous opinion



Score from 0 to 100
(Default is 50)





Using this data

Inter-format analysis

(2017 Online Dataset)

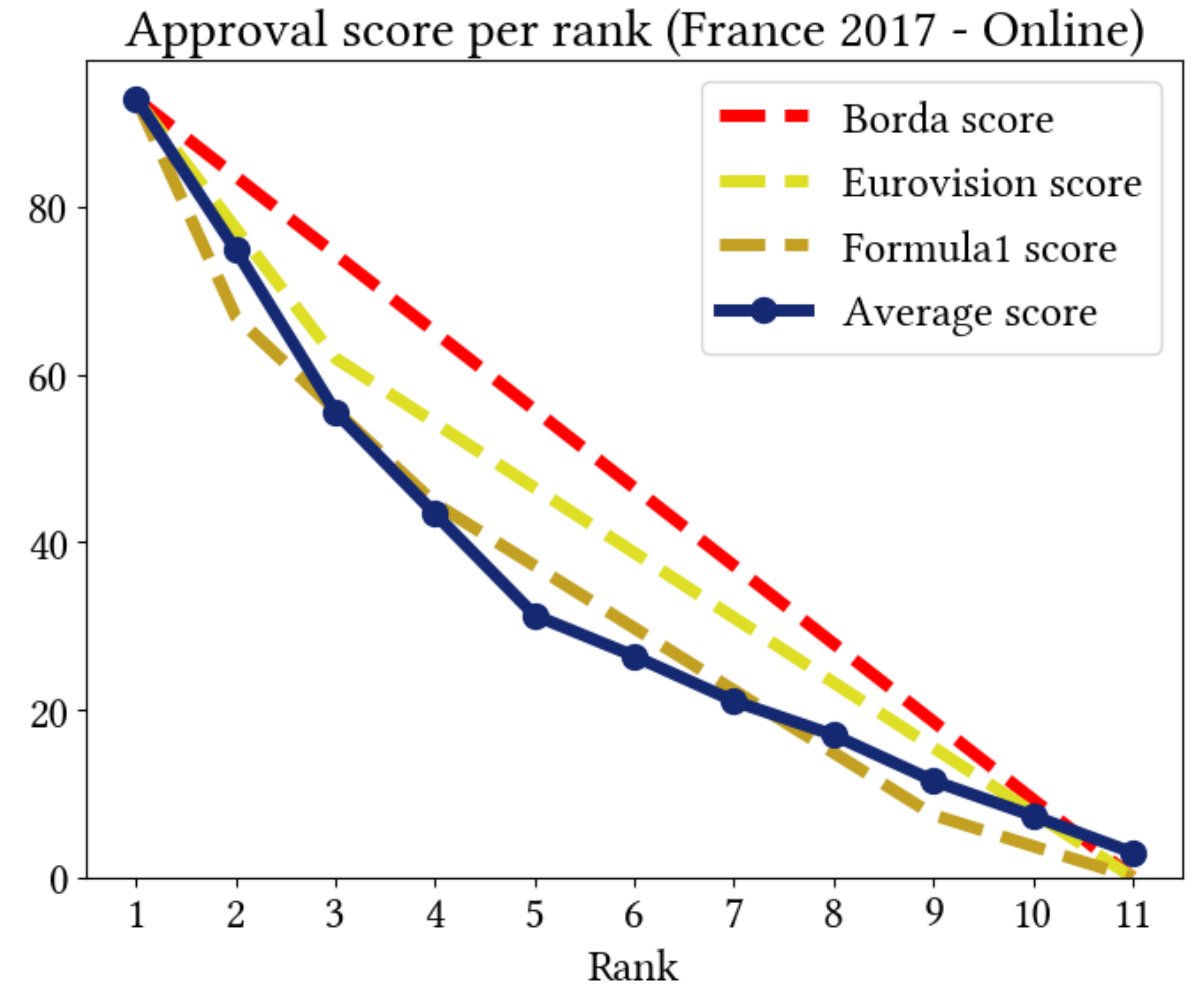
Full rankings

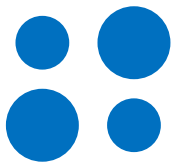


Continuous opinion



Score from 0 to 100
(Default is 50)





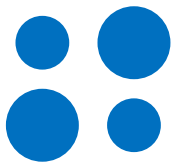
Using this data

High interpretability of results

“Selecting the Most Conflicting Pair of Candidates” (With Łukasz Janeczko, Andrzej Kaczmarczyk and Stanisław Szufa)



Mélenchon & Le Pen



Using this data

High interpretability of results

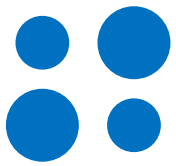
“Selecting the Most Conflicting Pair of Candidates” (With Łukasz Janeczko, Andrzej Kaczmarczyk and Stanisław Szufa)



Mélenchon & Le Pen



Ebi Sushi & Kappa maki



Using this data

The data format(s)

Approval

```
id,Nicolas Sarkozy,Fran
5,0,0,1,0,0,0,0,0,0,0,0
6,0,1,0,1,1,0,0,1,1,0
8,0,1,1,0,0,0,0,0,0,0
9,0,1,0,1,1,0,0,0,0,0
10,0,1,0,1,1,0,0,0,0,0
11,0,1,1,1,1,0,0,0,1,0
12,0,0,0,0,1,0,0,0,0,0
16,0,0,0,1,1,0,0,0,0,0
17,0,0,0,1,1,0,0,0,0,0
18,1,1,1,0,0,0,0,0,0,0
19,0,1,0,1,1,0,0,1,1,0
22,0,1,0,1,1,0,0,0,0,0
23,0,0,0,1,0,0,0,1,1,0
```

Scores

```
1,3,3,0,0,0,0,1,0,0,0,0
2,0,3,0,0,0,2,0,0,0,0,0
3,0,0,1,3,0,0,0,0,2,1,0
4,0,0,0,0,0,0,0,0,0,0,0
5,0,0,0,1,1,2,0,0,2,0,0
6,0,1,3,1,0,0,0,0,0,0,1
7,0,0,1,1,0,0,0,0,2,0,1
8,2,1,0,0,0,0,0,0,0,0,3
9,0,0,2,3,1,1,0,0,1,0,0
10,0,0,1,3,2,2,2,1,3,0,0
11,0,0,1,3,0,0,0,0,2,0,0
12,0,0,2,3,1,2,0,1,2,0,0
13,0,0,3,0,0,0,0,0,2,0,0
```

Rankings

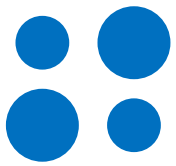
```
29483,0,0,0,0,0,0,0,0,0,1,0,0
35854,3,0,0,0,0,0,0,0,0,1,2
28415,0,0,0,0,0,0,2,0,0,1,3,4
29489,7,10,8,9,5,1,6,11,3,2,4
29474,9,8,5,7,11,1,2,10,3,4,6
29490,0,0,0,6,5,2,0,7,4,1,3
29487,0,0,0,0,0,2,0,0,1,0,0
27954,0,0,0,0,2,3,0,0,1,4,0
27727,8,9,5,10,4,3,7,11,1,2,6
29479,0,0,0,0,0,3,4,0,1,2,0
28912,0,0,0,0,3,2,0,0,1,0,0
31041,3,0,0,0,0,2,0,0,5,1,4
28864,6,0,7,0,8,1,5,0,2,4,3
28710,0,0,0,0,1,0,0,0,2,0,0
```

.csv files

one row = one voter

one column = one candidate

Voter ID to link the different files (e.g., weights)



Using this data

The website

The Voting Experiments Library

ALPHA

A collection of datasets of voting experiments for research, teaching or dissemination purposes.

Filters

Experiments types

- ☐ In situ
- ☐ Online

Preference formats

- ☐ Appreciations
- ☐ Approval
- ☐ Continuous
- ☐ Pairwise
- ☐ Rankings
- ☐ Scores
- ☐ Top-4 rankings

Voting rules

- ☐ Approval Voting

Voter Autrement 2022 - Online Experiment

2022

Country: France Type: Online Candidates: 12 Participants: 2308

In April 2022, we have run a voting experiment during the French presidential election. During this experiment, participants were asked to test several alternative voting methods to elect the French president, like scoring methods, instant-runoff voting, Borda with partial rankings, majority judgement and pairwise comparisons.

Approval Scores Continuous Appreciations Pairwise Rankings Top-4 rankings Approval Voting

Evaluative Voting Majority Judgement IRV Borda-4 Condorcet

Reference to Cite

 **Voter Autrement 2022 - Online Experiment**
Théo Delemazure, Sylvain Bouveret (2024)
[Reference link](#)

Access to the dataset

In the future:

- Downloading datasets
- Basic data analysis
- Basic tutorials
- Context on the election and on the experiment

It should *also* be on Preflib!

theo.delemazure.fr/datasets/

Conclusion



Conclusion

Do voting experiments during elections!
(I can help with the website!)

You already have voting experiment data
(even if not clean)? Contact me!

You need data for experiments on a
paper or a project? **Use this dataset!**

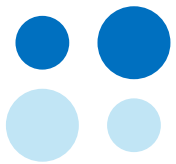
You have ideas on how to make these
datasets easy to use? Tell me!



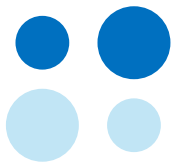
theo.delemazure.fr/datasets/

*Thanks for your
attention!*

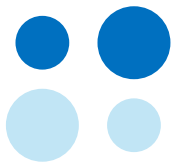
Appendix



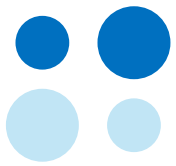
Year	City	n	m	Format(s)		Rule(s)	Reference
2002	Gy-Les-Nonains	365	16	Approval		AV	Laslier and Van der Straeten
	Orsay	2220					
2007	Louvigny	1063	12	Approval Scores (0,1,2)		AV RV	Baujard and Igersheim
	Cigné	233					
	Illkirch	1540					
	Faches-Thumesnil	960		Partial rankings		IRV	Farvaque et al.
	Orsay	1733		Appreciations		MJ	Balinski and Laraki
2012	Strasbourg	1023	10	Approval	Scores (0,...,20)	AV RV	Baujard et al.
	Louvigny	930			Scores (-1,0,1)		
	Saint-Etienne	387			Scores (0,1,2)		
2017	Allevard	836	11	Scores		RV	Bouveret et al.
	Strasbourg	1071		Approval, Scores		AV, RV	
	Grenoble	1069		Approval, Continuous[0,1]		AV, RV	
	Hérouville-St-Clair	711		Approval, Scores		AV, RV	
	Crolles	2617		Approval, Scores		AV, RV, AVR	
	Fort-de-France	508		Rankings		IRV, Borda	Kamwa et al.
2022	Strasbourg	938	12	Approval, Scores, Apprec.		AV, RV, MJ	Baujard et al.



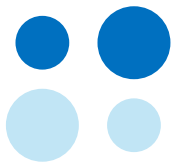
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Year	Name	n	m	Format(s)	Rule(s)	Reference
2012	Vote Pluriel	8044	10	Approval, Partial Rankings	AV, IRV	<i>Van der Straeten et al.</i>
	Vote de Valeur	11539		Scores	RV	<i>Laslier et al.</i>
2017	Voter Autrement	37462	11	Approval, Partial Rankings, Scores, Pairwise comparisons	AV, RV, 4-Borda, IRV, Condorcet	<i>Bouveret et al.</i>
2022	Un autre Vote	2307	12	Approval, Partial Rankings, Scores, Pairwise comparisons, Appreciations	AV, RV, 4-Borda, IRV, Condorcet, MJ	<i>Delemazure and Bouveret</i>
	<i>Representative Sample</i>	2122		Approval, Scores, Appreciations	AV, RV, MJ	<i>Baujard et al</i>



Year	Name	n	m	Format(s)	Rule(s)	Reference
2012	Vote Pluriel	8044	10	Approval, Partial Rankings	AV, IRV	<i>Van der Straeten et al.</i>
	Vote de Valeur	11539		Scores	RV	<i>Laslier et al.</i>
2017	Voter Autrement	37462	11	Approval, Partial Rankings, Scores, Pairwise comparisons	AV, RV, 4-Borda, IRV, Condorcet	<i>Bouveret et al.</i>
2022	Un autre Vote	2307	12	Approval, Partial Rankings, Scores, Pairwise comparisons, Appreciations	AV, RV, 4-Borda, IRV, Condorcet, MJ	<i>Delemazure and Bouveret</i>
	<i>Representative Sample</i>	2122		Approval, Scores, Appreciations	AV, RV, MJ	<i>Baujard et al</i>



Voting experiments

List of datasets

Fields

Year	Election	n	m	Rule(s)	Reference
2008	German State Election	2725	7	Approval Voting	<i>Alós-Ferrer and Granić</i>
2009	German Federal Election	4218	8		
2011	Benin Presidential election	1470	13	Approval Voting	<i>Kabre et al</i>
2012	Local elections in Bucharest, Romania	278	18	Plurality Runoff, Borda, Approval Voting, Limited Voting, Score voting (0,...,10)	<i>Roescu</i>
2015	Parliament election in the state of Styria, Austria				<i>Darmann et al</i>
2019	Parliament election in the state of Styria, Austria				<i>Darmann and Klamler</i>

Online

Year	Election	n	m	Rule(s)	Reference
2011	Canadian Provincial election				<i>Blais et al</i>
2015	European Parliamentary Election				<i>Laslier et al</i>
2016	USA presidential election	2367	4-9		<i>Igersheim et al</i>
2022	Italian Parliamentary Election				<i>Delemazure et al</i>
2024	European Parliamentary Election (France)	4048	38	Threshold	<i>Delemazure et al</i>