☑️ Wählt diesen Workshop!

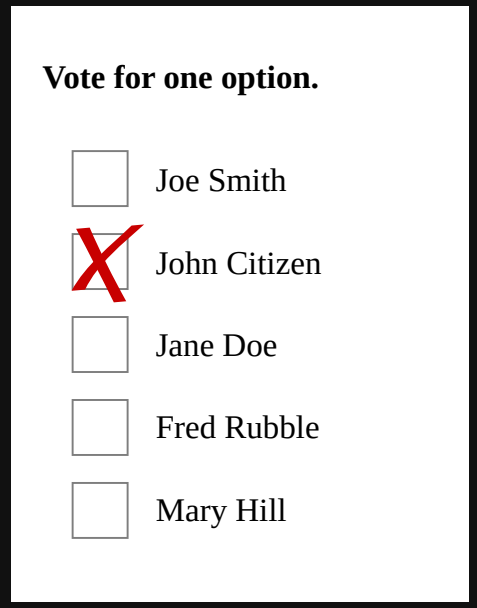
Ein interaktiver Streifzug durch verschiedene Wahlverfahren

piko & blinry – 39C3

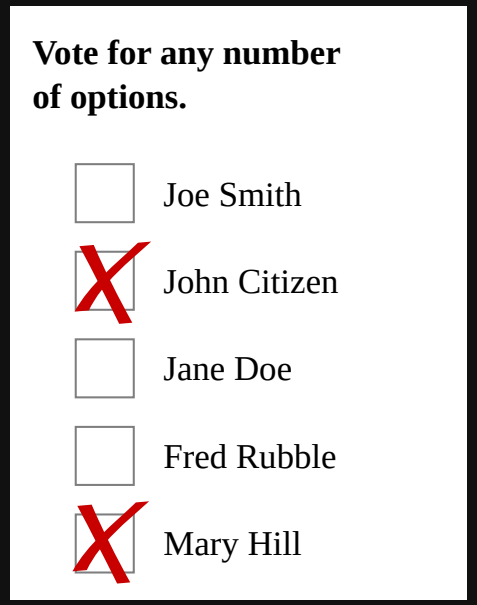
Einführung

Stimmzettel

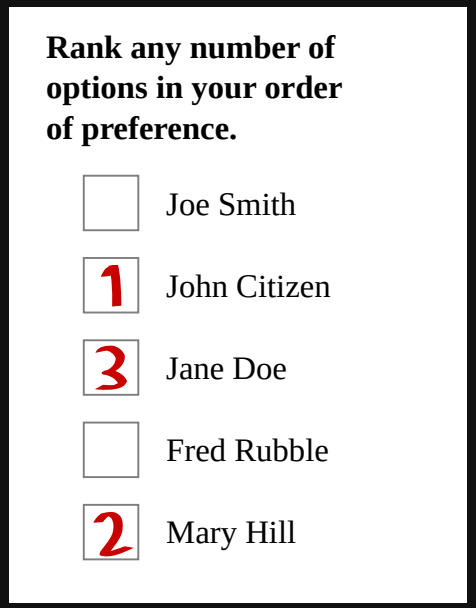
Plurality vote



Approval ballot



Preferential ballot



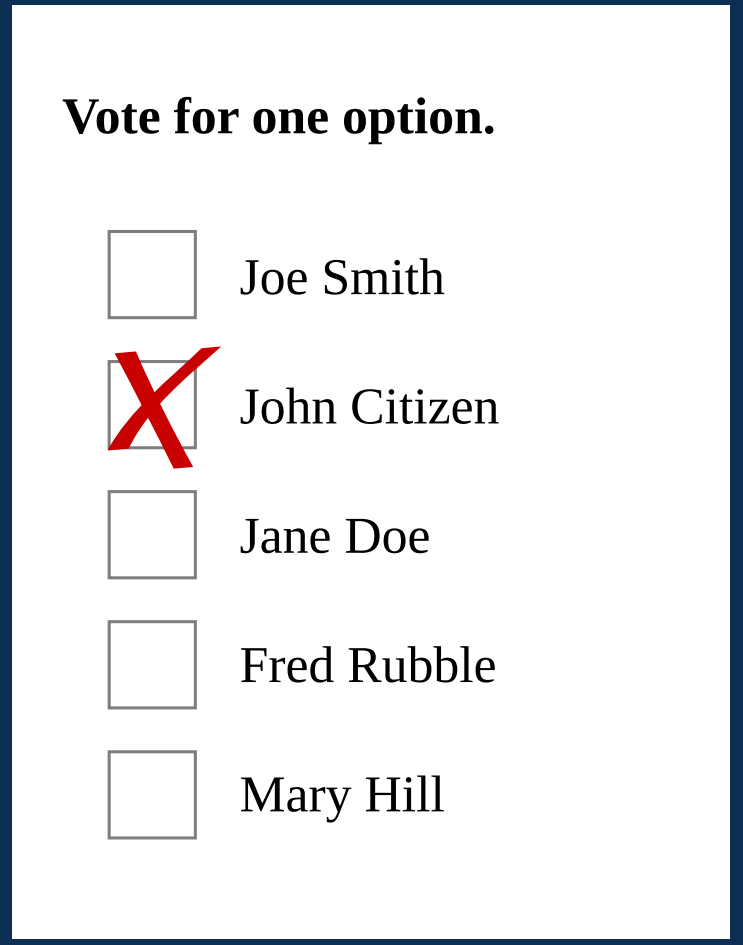
Rated ballot

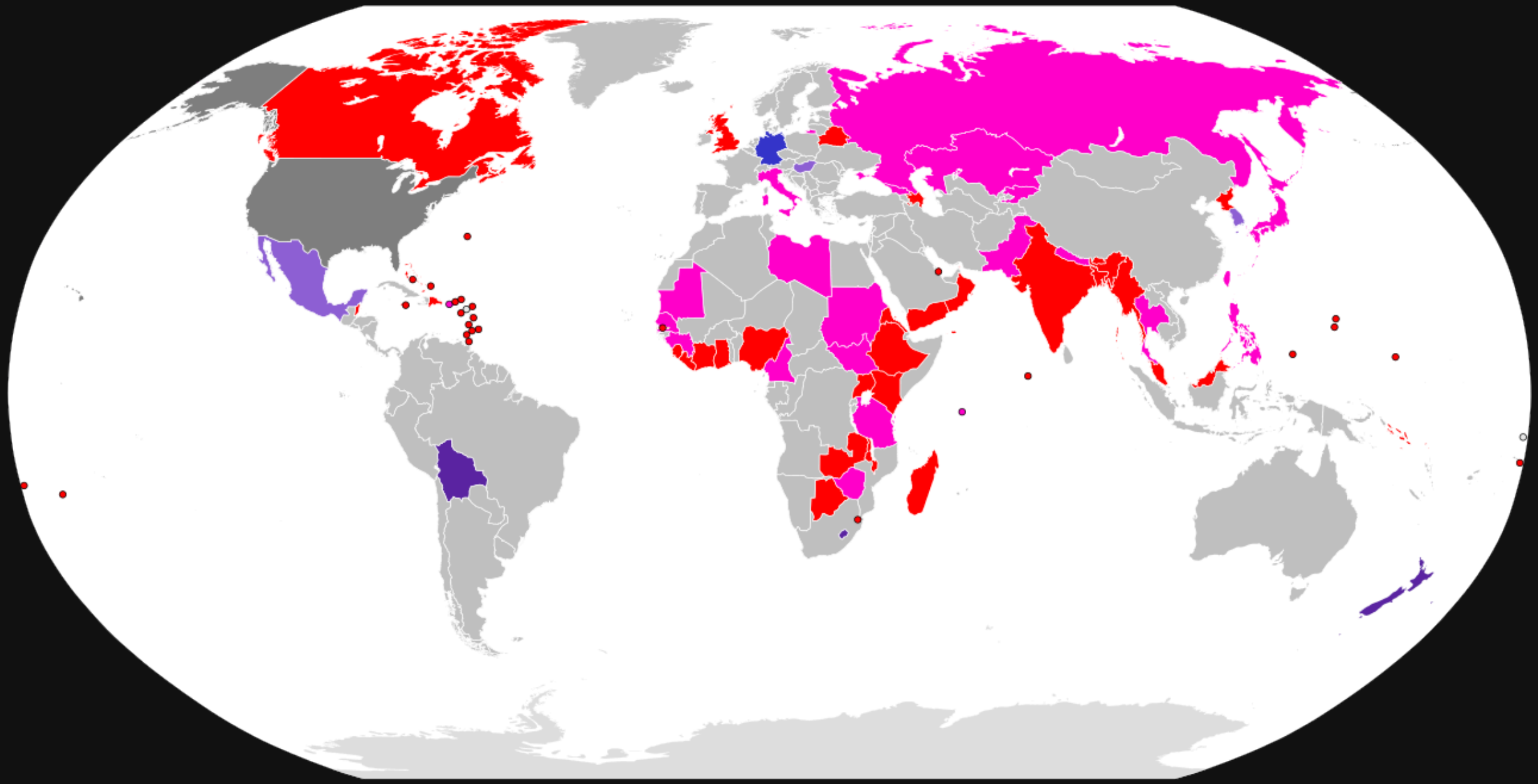
Teil 1

Verfahren mit einem Gewinny

Relative Mehrheitswahl

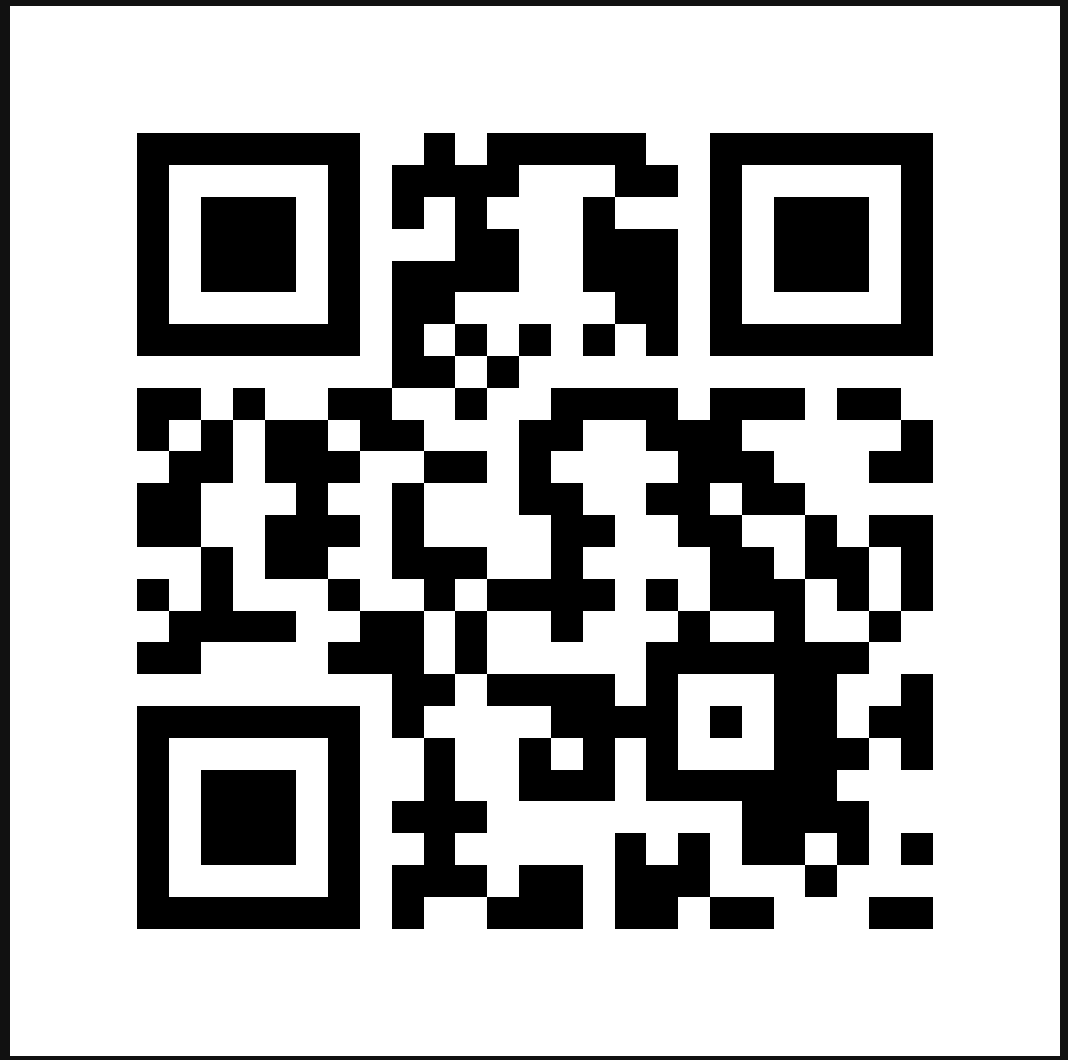
(First-preference plurality voting, Choose one, First-past-the-post)





https://en.wikipedia.org/wiki/File:FPTP_lower_house.svg

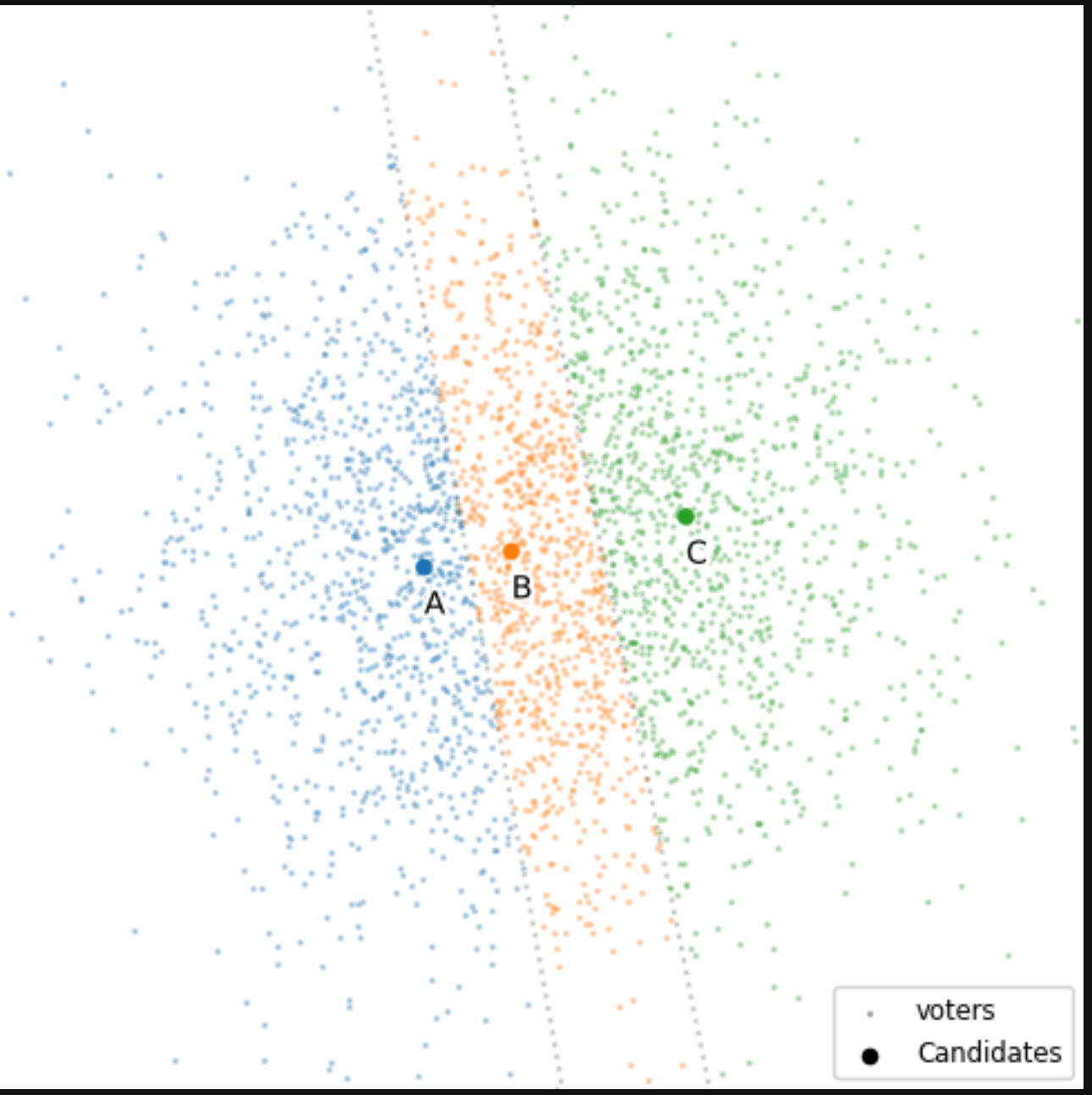
https://bettervoting.com/r4xf8y

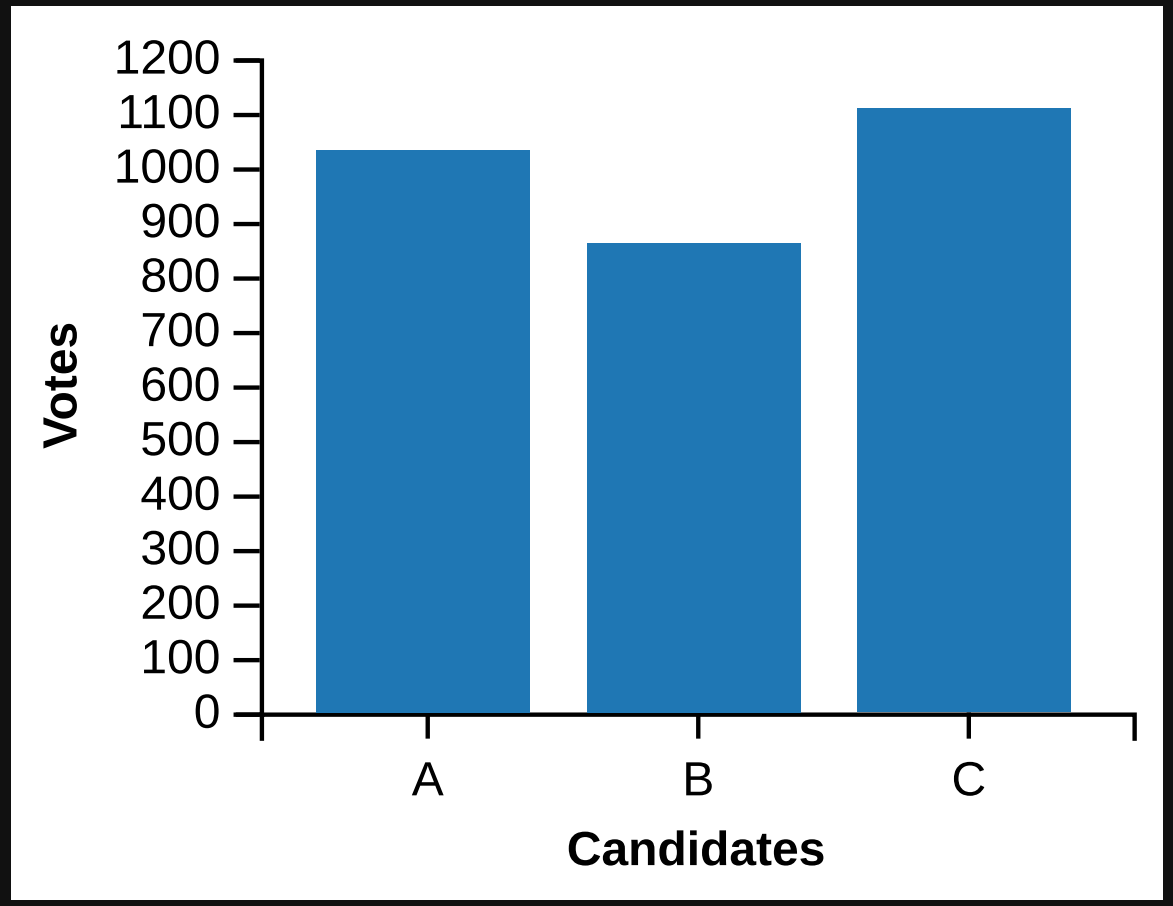


Schokoladenproblem: "Vote splitting", "Cloning paradox"

Table of pathological behaviors

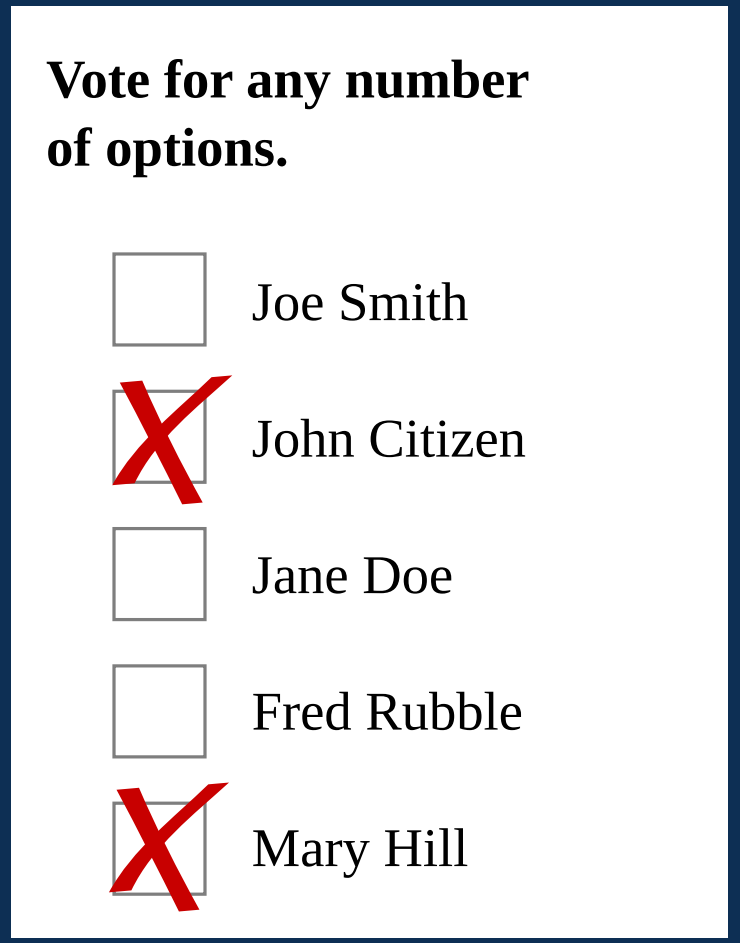
	Pathology	Explanation/details
✗	Frustrated majority	The frustrated majority paradox occurs when a majority of voters prefer some candidate *Brighton* to every other candidate, but *Brighton* still loses the election. First-past-the-post is vulnerable to this paradox because of vote-splitting.[5]
✗	Condorcet loser paradox	The Condorcet loser paradox happens when a majority of voters prefer every other candidate to *Brighton*, but *Brighton* still wins. First-past-the-post is vulnerable to this paradox because of vote-splitting.[5]
✗	Center squeeze	The center squeeze describes a type of violation of Independence of irrelevant alternatives primarily affecting voting rules in the Plurality-rule family where the Condorcet winner is eliminated in an early round or otherwise due to a lack of first-preference support.
✗	Spoiler effect	A spoiler effect is when the results of an election between *A* and *B* is affected by voters' opinions on an unrelated candidate *C*. First-past-the-post does not meet this criterion, which makes it vulnerable to spoilers.
✗	Cloning paradox	The cloning paradox is a particular kind of spoiler effect that involves several perfect copies, or "clones", of a candidate. Candidate-cloning causes vote-splitting in FPP.
✗	Best-is-worst paradox	The best-is-worst paradox occurs when an electoral system declares the same candidate to be in first and last place, depending on whether voters rank candidates from best-to-worst or worst-to-best. FPP demonstrates this pathology, because a candidate can be both the FPP winner and also the anti-plurality loser.
✗	Lesser-evil voting	Lesser-evil voting occurs when voters are forced to support a "lesser of two evils" by rating them higher than their actual favorite candidate. FPP is vulnerable to this pathology.


A
B
C
voters
Candidates

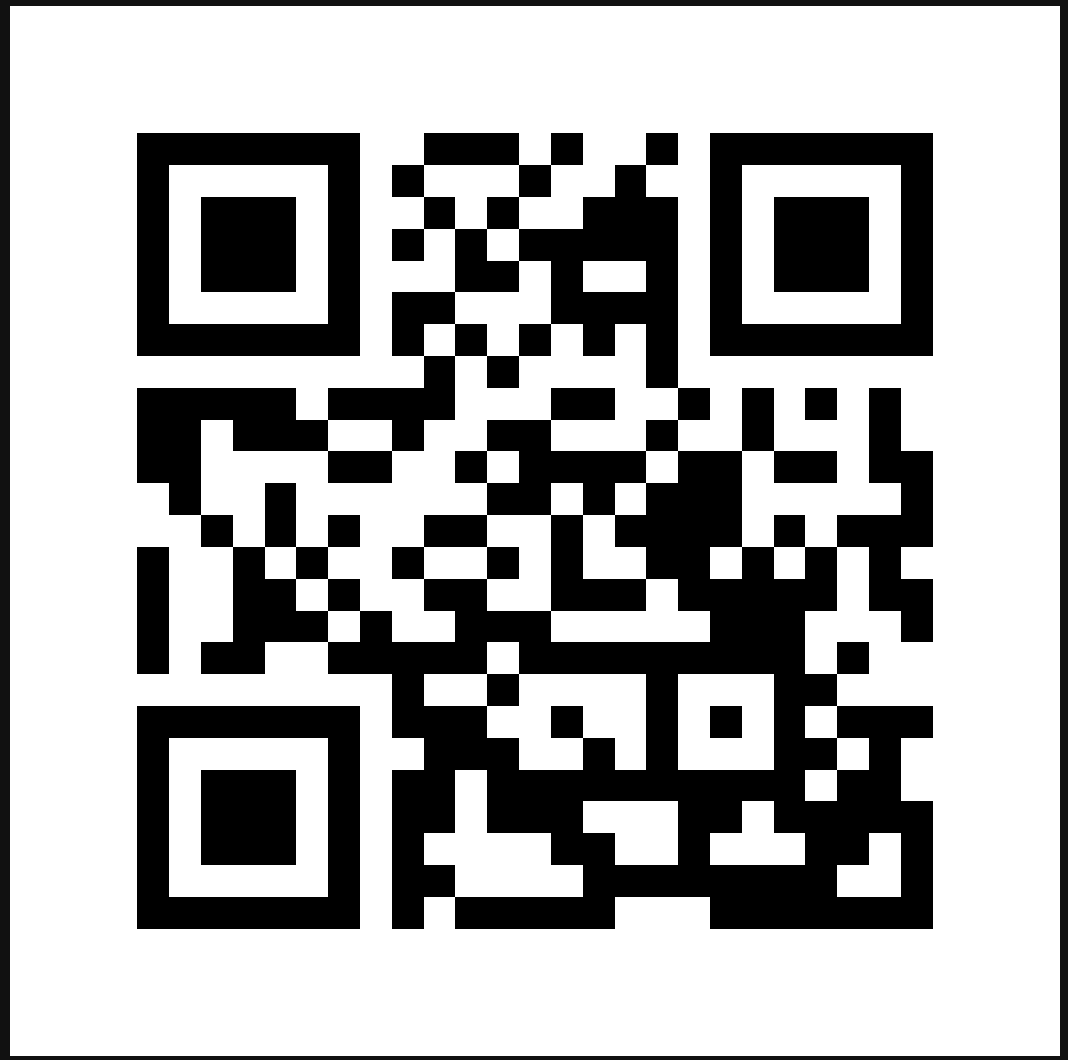

1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Votes
A
B
C
Candidates

Zustimmungswahl

(approval)



https://bettervoting.com/cr7frx



Bewertungswahl

(Score voting, Range voting)

Internet Engineering Task Force (IETF)
Request for Comments: 7282
Category: Informational
ISSN: 2070-1721

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June 2014

On Consensus and Humming in the IETF

Abstract

The IETF has had a long tradition of doing its technical work through a consensus process, taking into account the different views among IETF participants and coming to (at least rough) consensus on technical matters. In particular, the IETF is supposed not to be run by a "majority rule" philosophy. This is why we engage in rituals like "humming" instead of voting. However, more and more of our actions are now indistinguishable from voting, and quite often we are letting the majority win the day without consideration of minority concerns. This document explains some features of rough consensus, what is not rough consensus, how we have gotten away from it, how we might think about it differently, and the things we can do in order to really achieve rough consensus.

Note: This document is quite consciously being put forward as Informational. It does not propose to change any IETF processes and is therefore not a BCP. It is simply a collection of principles, hopefully around which the IETF can come to (at least rough) consensus.

Ausprobieren: Lieblingsjahreszeit

Variante: STAR voting

How does STAR Voting work?

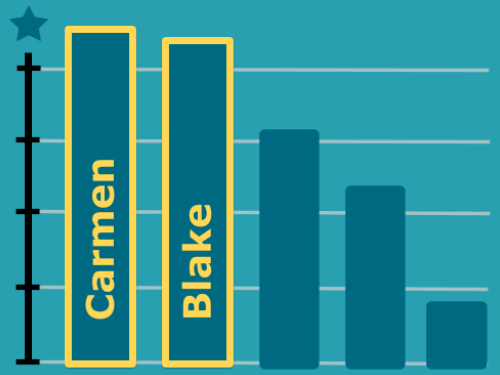
STAR VOTING
SCORE - THEN - AUTOMATIC - RUNOFF

Instructions:
Give your favorite(s) 5 stars, your last choice(s) 0 stars, and vote your conscience.

	Worst 0	1	2	3	4	Best 5
Andre	0	1	2	3	4	●
Blake	●	1	2	3	4	5
Carmen	0	1	2	3	●	5
David	0	1	2	3	●	5
Erin	0	●	2	3	4	5

Scoring Round

The two highest-scoring candidates are finalists.



Carmen and Blake advance to the next round.

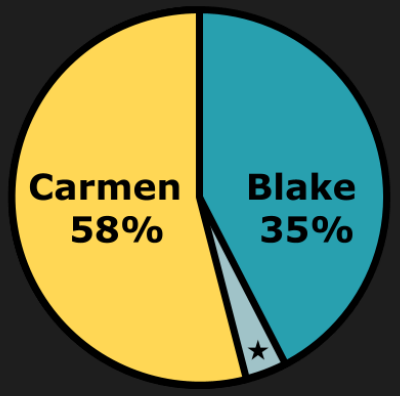
Automatic Runoff

In the runoff, your ballot counts as one vote for the finalist you prefer.

Blake	●	1	2	3	4	5
Carmen	0	1	2	3	●	5

This vote goes to Carmen because she was scored higher than Blake.

Results



The finalist with the most votes wins!

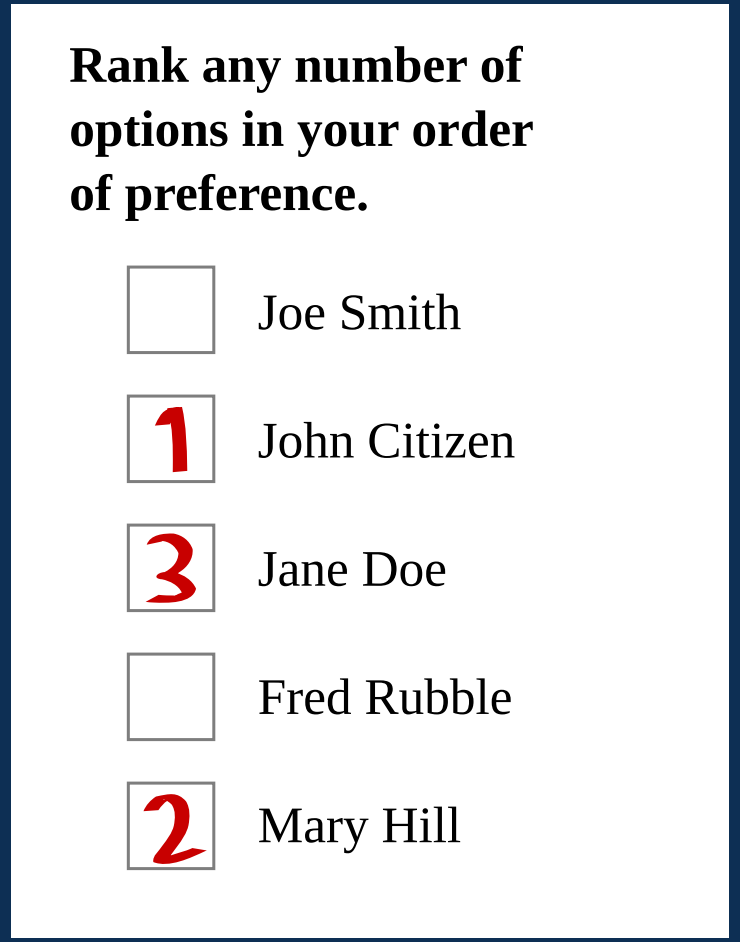
★ Equal Support:
both finalists scored equally

Add up the stars, then add up the votes!

https://bettervoting.com/r6d8kw

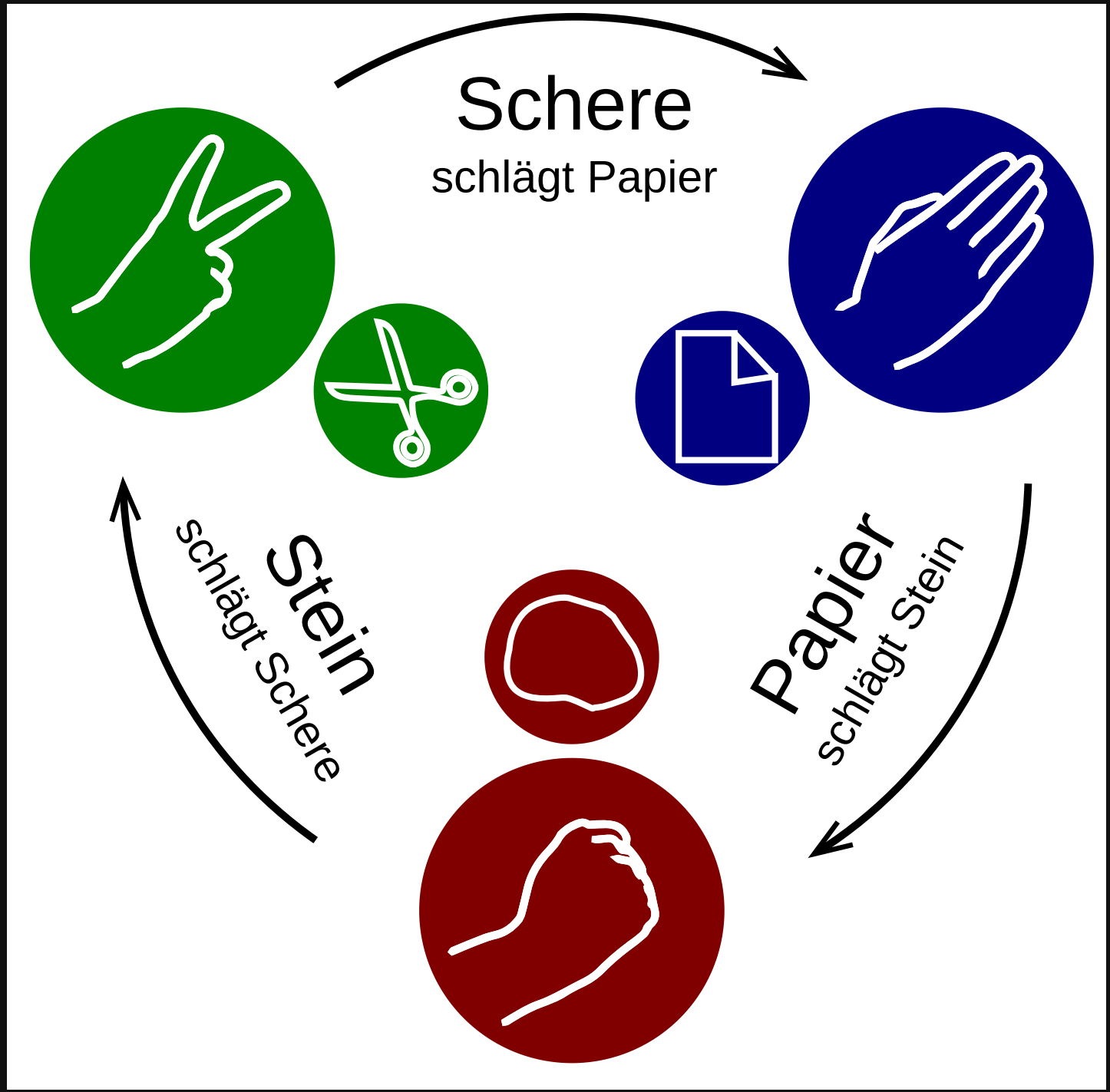
Präferenzwahl

(ranked choice voting)



Untergruppe: Condorcet-Methoden

https://bettervoting.com/3v3whb


Schere
schlägt Papier
Papier
schlägt Stein
Stein
schlägt Schere

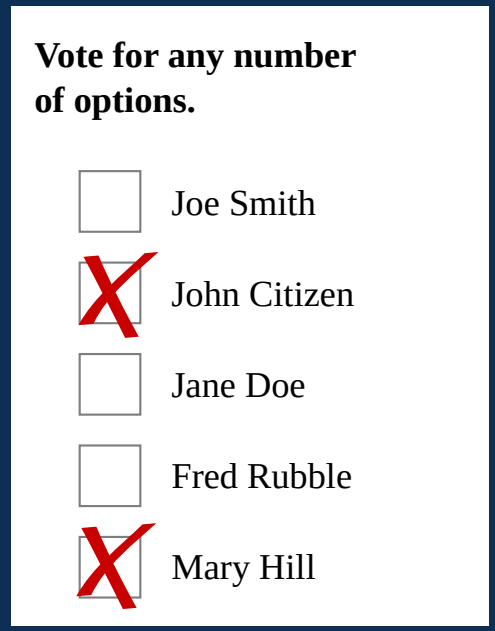
Teil 2

Verfahren mit mehreren Gewinnys

Zustimmungs-/Bewertungswahl mit mehreren Gewinnys

Beispiel: Wahl von Vorständen in Hackspaces

⇒ Keine proportionale Repräsentation



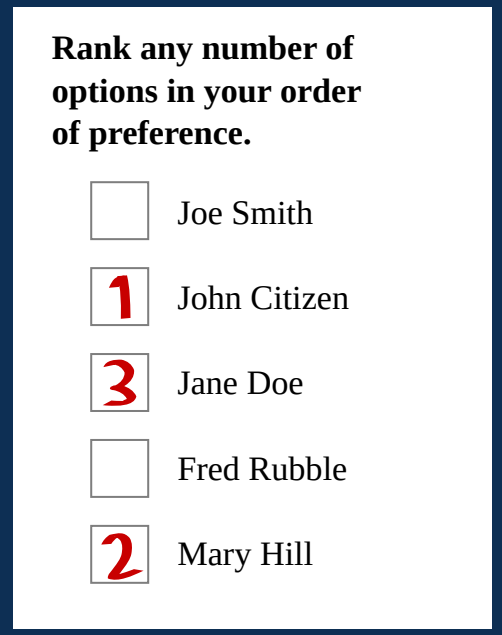
Personalisiertes Verhältniswahlrecht

(Mixed-member proportional voting, "the German system")

Kombiniert Mehrheitswahl (in Wahlkreisen) mit proportionaler Verhältniswahl

Übertragbare Einzelstimmgebung

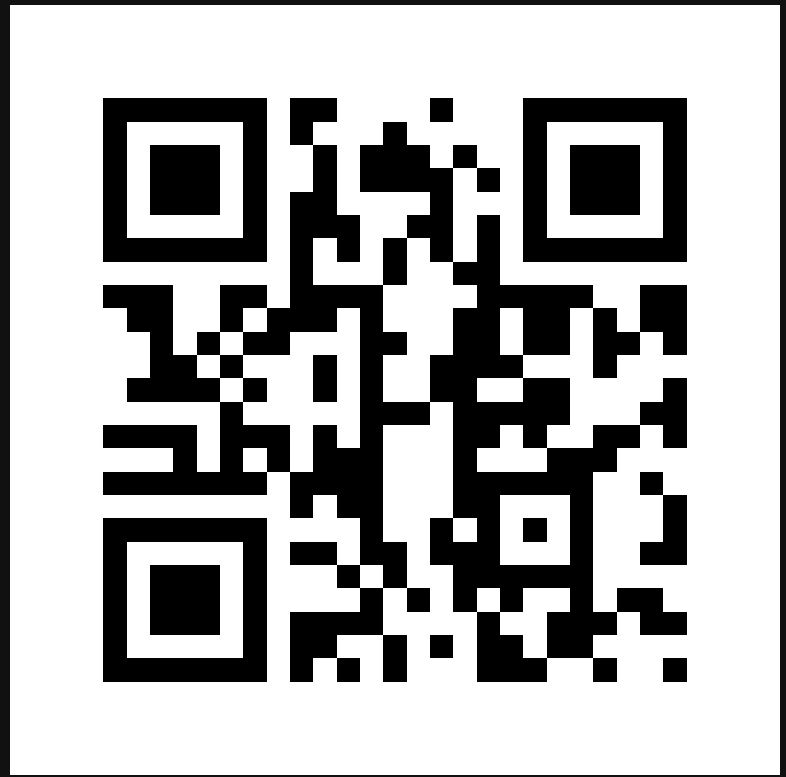
(single transferable vote, proportional ranked-choice voting)



STAR voting für mehrere Gewinnys

Kuchen!

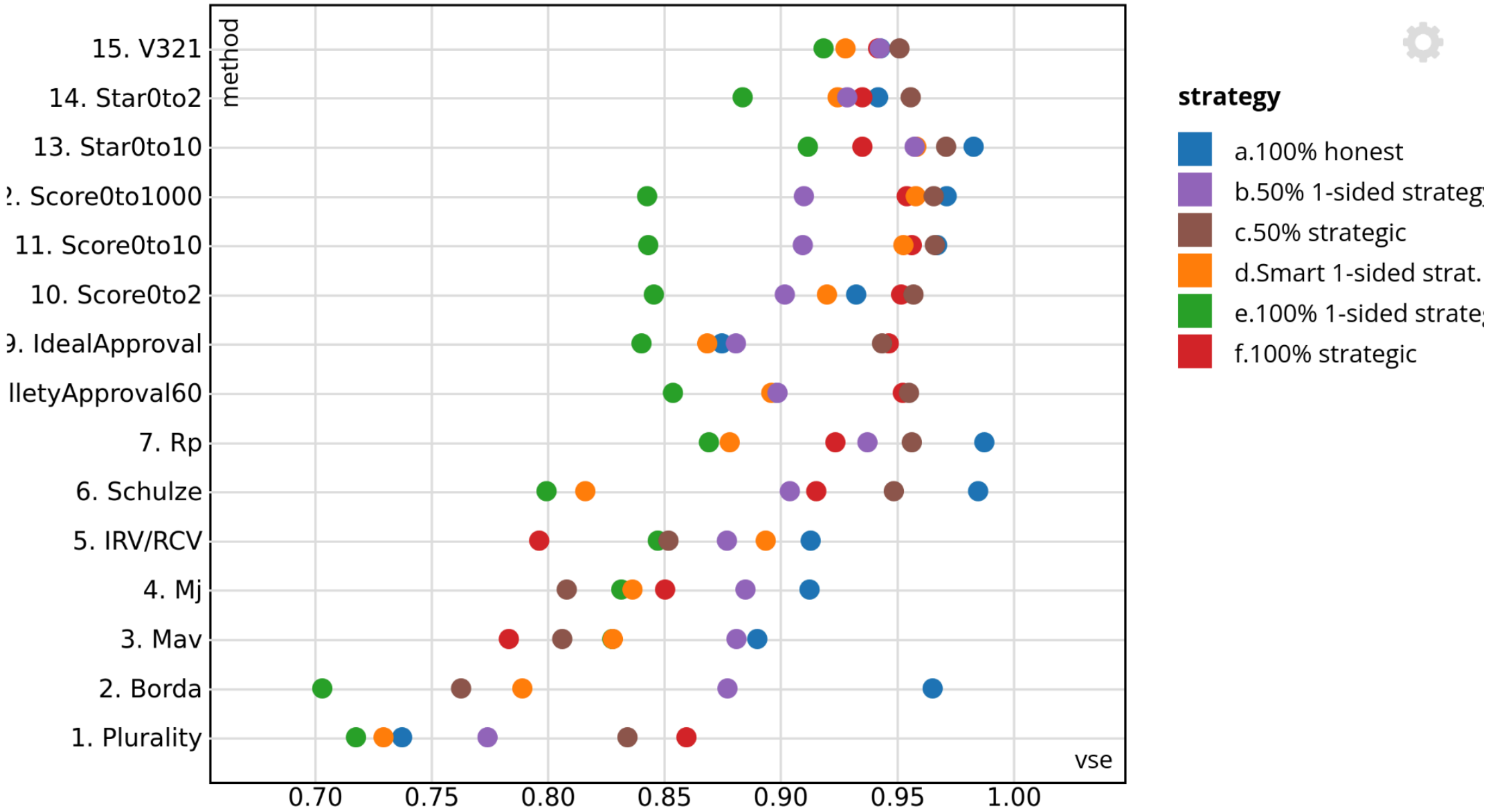
https://bettervoting.com/3r4yq6



Wie "gut" sind nun die Verfahren?

Comparison of single-winner voting systems [hide]

Criterion / Method	Majority winner	Majority loser	Mutual majority	Condorcet winner [Tn 1]	Condorcet loser	Smith [Tn 1]	Smith-IIA [Tn 1]	IIA/ LIIA [Tn 1]	Clone-proof	Mono-tone	Consistency	Partici-pation	
First-past-the-post	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes	
Anti-plurality	No	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	
Two round system	Yes	Yes	No	No	Yes	No	No	No	No	No	No	No	
Instant-runoff	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	No	No	
Coombs	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	
Nanson	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	
Baldwin	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	
Tideman alternative	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	
Minimax	Yes	No	No	Yes[Tn 2]	No	No	No	No	No	Yes	No	No	
Copeland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	No	
Black	Yes	Yes	No	Yes	Yes	No	No	No	No	Yes	No	No	



https://electionscience.github.io/vse-sim/

approval.vote // Voting Method finder

Mix and match components to design your ideal voting system

🔎 Filters

Use these facets to narrow down voting methods. They don't lock in a choice — pick a method on the right when ready.

Election Type ⓘ

- [ ] Single Winner
- [x] Multi Winner

Ballot Type ⓘ

- [ ] Choose X
- [ ] Ranked
- [x] Score

Party Structure ⓘ

- [x] Requires parties (e.g., Party List, MMP)
- [x] Candidate-based (no parties required)

Real-World Use ⓘ

- [ ] Currently in use

📚 Voting Methods

Showing 4 methods

Block Score Voting

Highest total scores win multiple seats

Method of Equal Shares ⚖️ ⭐

Equal budget per voter

STAR-PR ⚖️ ⭐

Proportional STAR voting

Allocated Score ⚖️

Practical proportional score voting

3-2-1 Voting

System Analysis

Debug: activeTooltip = ""

Proportionality	0/5
Voter Simplicity	4/5
Honest Strategy Resistance	4/5
Representation Quality	4/5
Strategic Straightforwardness	3/5

Ballot Type: Give each candidate a numerical score (0 to 5). Score voting works best with many candidates and relatively few voters, where the expressivity helps prevent ties

Voting Method: Score 3-2-1, advance top 2, pick winner

Single-Winner Election: Electing 1 seat

Detailed Analysis

Overview: Voters score candidates as Good (3), OK (2), or Bad (1). The two highest-scoring candidates advance to a runoff based on who is rated higher by more voters. Simple to understand and

Danke!

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