## Social Choice

## Week 8

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- What is a social welfare function?


## Voting Rules

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- Which do you like better? Why?


## Voting Rules

- What is plurality?
- What is Borda?
- What is pairwise (/successive) elimination?
- What is plurality with elimination?
- What is cumulative voting?
- What is approval voting?
- Which do you like better? Why?
- ...And, what's Condorcet consistency?


## Voting Exercise

Imagine that we can take a class trip, to one of:
(1) Orlando
(2) Istanbul
(3) New York
(9) Bangkok

Where should we all go?

## Voting Exercise

Imagine that we can take a class trip, to one of:
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(2) Istanbul
(3) New York
(4) Bangkok

Where should we all go?

- Figure out your preference ordering


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Where should we all go?

- Figure out your preference ordering
- Plurality (stand up, move into groups)


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Imagine that we can take a class trip, to one of:
(1) Orlando
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Where should we all go?

- Figure out your preference ordering
- Plurality (stand up, move into groups)
- Plurality with elimination (shuffle the groups)


## Voting Exercise

Imagine that we can take a class trip, to one of:
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Where should we all go?

- Figure out your preference ordering
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- Plurality with elimination (shuffle the groups)
- Pairwise elimination (more moving around)


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Where should we all go?

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- Plurality with elimination (shuffle the groups)
- Pairwise elimination (more moving around)
- Borda (hand in preference orderings)
- Approval voting (check off items on board)


## Let's put this into practice!

We need to finalize details for projects in this course. Here are the constraints.

- Last day of class is April 4.
- Exam is April 11.
- Must set times. 2 PM - 5 PM?
- Everything is due last day of term. April 24 is the last day of exams. Perhaps we could stretch this to April 26 (Friday). April 30 (Tuesday) is the actual last day of term.
- Is anyone graduating this year?
- We need $k$ days to do peer evaluation. Tradeoff between available time for peer evaluation (bigger $k$ ) and available time for project (smaller $k$ ).
- So, what deadlines should we set for projects, and for peer eval?


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