## **Experiments** Research Questions

## **Implementation**

## Mechanism Construct

1. Would a majority vote suffice in discovering the truth?

- 2. Does the success of the SP algorithm translate to Fake News Discovery? How should it be adopted?
- 3. Would profiling the workers with multiple questions (PWM/Cultural/Cognitive) make a significant difference?

. Majority Vote

- 6. Cultural consensus
- 2. Random Dictator 3. Max. confidence
- 8. Cognitive hierarchy
- 4. Surprisingly Popular
- 5. Possible Worlds Model (PWM)

- 1. How do different scoring functions change the workers' behaviors?
- 2. Which Truth Serum is better suited to our problem of fake news?
- 3. Which solution is more resistant to collusion?

- 1. Truth Agreement
- 6. Bayesian Truth Serum
- 2. Proper Scoring Rules
- 3. Peer Consistency
- 4. Peer Prediction
- 5. Peer Truth Serum
- 9. Peer Truth Serum for

8. Correlated Agreement

- Crowdsourcing
- 10. ...

- 1. How should we design the news capture process?
- 2. What should we do with over-lapping news stories?
- 3. How to reward a meaningful discussion?
- 4. How to measure the quality of the arguments? Maybe use the Argument Discovery via Crowdsourcing?

- 1. Argument Discovery via Crowdsourcing
- 2. Hypothes.is
- 3. Stack-overflow-style discussion
- 4. ...

Incentivizing Truthfulness

Judgement Aggregation (Voting)

Argument Discovery / Annotation / Discussion