

# 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 ?

1. **Majority Vote**
2. Random Dictator
3. Max. confidence
4. **Surprisingly Popular**
5. **Possible Worlds Model (PWM)**
6. Cultural consensus
8. Cognitive hierarchy
9. ...

Judgement Aggregation (Voting)

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
2. **Proper Scoring Rules**
3. Peer Consistency
4. Peer Prediction
5. **Peer Truth Serum**
6. Bayesian Truth Serum
8. Correlated Agreement
9. Peer Truth Serum for Crowdsourcing
10. ...

Incentivizing Truthfulness

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. ...

Argument Discovery / Annotation / Discussion

Learning what the crowd thinks about the truth

Reward truth telling

Publishing the truth