

# Machine Learning and Economics

## Discussion questions – Meeting #4

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# The Algorithmic Foundations of Differential Privacy

- Is this the notion of privacy we should care about?
- How can we connect privacy to individual welfare (utility)?
  - Is differential privacy the solution to a well-specified decision problem?
- What problems does differential privacy not solve?
  - Especially in light of the second article?
- What is the marginal return of observations from a learning theory perspective?
  - In terms of learning about a given individual?
  - In terms of learning about other individuals?
  - Compared to the average / aggregate return?

# Democratic Data: A Relational Theory For Data Governance

- How can we translate the arguments here into economics terminology?
  - Bayesian updating?
  - Externalities?
  - Complementarities? Economies of scale?
- What gets lost in this translation?
- Are property rights or democracy the solution to privacy concerns?
- How should we think about individual rights versus causal effects
  - of regulation / data accumulation regimes, at the population level?
  - How would welfare economics adjudicate these?