Examples of Laboratory Experiments

- Ultimatum/Dictator Game
- Public Goods Game

Ultimatum Bargaining Game

- Original: Güth, Werner, Rolf Schmittberger, and Bernd Schwarze. "An experimental analysis of ultimatum bargaining." Journal of economic behavior & organization 3.4 (1982): 367-388.
- Two players (proposer and responder) bargain over a division of a given sum of money.
    1. **proposer**: makes an offer how to split the sum
    2. **responder:** accepts or rejects

        if accepted they split the money

        if rejected neither gets anything
- unique subgame perfect equilibrium the proposer suggests the responder the smallest amount possible and the responder accepts

Dictator Bargaining Game

- Original: Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. "Fairness and the assumptions of economics." *Journal of business* (1986): S285-S300.
- Two players (dictator and recipient) bargain over a division of a given sum of money.
  1. **dictator**: splits the sum
  2. **recipient:** is informed of endowment left by the dictator
- unique subgame perfect equilibrium: the dictator takes it all
- ***More about Ultimatum and Dictator Games in week 9 and 10***

Public Goods Game

- Original Marwell, Gerald, and Ruth E. Ames. "Experiments on the provision of public goods. I. Resources, interest, group size, and the free-rider problem." *American Journal of sociology* (1979)
- One of the most standard game in experimental economics.
- Each player contributes to **common** or **private account**. Usual:
  - Each player gets same percentage of total private account contributions.
  - Contributions are multiplied by a coefficient >1.
- The group's total payoff is maximized when everyone contributes all of their tokens to the public pool.
- Game equilibria is zero contribution by every player.
  - But experimental results show a different story.
- Those who do not contribute are called free riders.

Public Goods Game

- Applicable on charitable giving, fundraising, transportation etc.
- Large contributions to public economics theory.
- Addaptions:
  - Opened communication in the middle of the experiment.
  - Possibility of punishment.
    People do punish (↓contribution => ↑punishment) and cooperation incereases *(Fehr Gächter, 2000)*

    "Counter fire" lowers cooperation (*Nikiforakis, 2008)*

    Stronger punishment increases contributions *(Denant-Boemont, 2007)*

    Anonymous punishment is more efficient *(Denant-Boemont, 2007)*

- ***More about Public Goods Game in week 7 and 8***