## Modified Newtonian Dynamics, A possible alternative to the dark matter hypothesis.

## Thomas Rot

- Part 1: Why do we need a new gravitation theory?
  - Introduction
  - Pioneer Anomaly
  - Rotation curve problem
  - Newtonian mechanics
- Part 2: Does MOND solve our problems?
  - MOND, as a theory
  - Flattening of the rotation curves for model galaxies
  - Computing the rotation curves
- Part 3: Cosmological implications and conclusion