

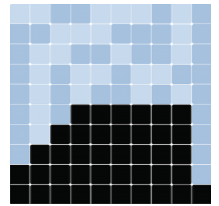
Agent-Based Modeling (Master SIED)

Andrea G. B. Tettamanzi
I3S Laboratory – SPARKS Team
`andrea.tettamanzi@univ-cotedazur.fr`



Unit 2

Building a Simple Model



Mesa Tutorial

- Must have Python 3+ and Mesa installed
- Go to <https://mesa.readthedocs.io>
- Follow the link to the “Mesa Introductory Tutorial”
 - Based on the Boltzmann Wealth Model
 - The code should be in the Examples folder of your local Mesa installation
 - We will write the code from scratch, step by step

The Boltzmann Wealth Model

- Simple model from econophysics
- A statistical mechanics approach to wealth distribution
 - There are a number of agents.
 - All agents begin with 1 unit of money.
 - At every step, an agent gives 1 unit of money (if they have it) to some other agent.
- Despite its simplicity, interesting results