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Allocation of Wealth and Emergence of Inequality NATALIA ROMERO, LUC WILLE, Florida Atlantic University — Though socioeconomic inequality has always been a classic subject of study in sociology and finance, it has caught the attention of many physicists in the last decade. The application of kinetic theory of gases to study the emergence of wealth distributions continues to develop itself as a new field of applications of statistical physics. The challenge for physicists is to identify basic microscopic interactions among individuals, namely trading and investment, which rule the macroscopic statistics of the system of individuals as a whole. Several models have been elaborated and certain microscopic parameters were identified as vital for the existence of statistically different wealth distributions. We present a model which considers different savings propensities, stochastic nature of trades and investments, and explore specific choices of micro-trading parameters which produce qualitatively different wealth distributions like those of the United States and Australia.

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