

COLLECTIVE SOCIAL PHENOMENA: SIMPLE MODELS AND/OR BIG DATA

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I will give a short overview of problems of collective social phenomena being considered from a physicist perspective and I will discuss the contribution of this perspective to the new Computational Social Sciences. I will address the question of what can be learnt from simple models in the middle of the data deluge and illustrate the answer to this question in two contexts: i) Voter model and consensus, stochastic effects, electoral processes, fragmentation transitions in complex networks and community structure in on-line games. ii) Spatial segregation phenomena: Schelling's model, ghettos and land use.

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