## Abstract for Dynamics Days 2013

Minisymposium: Interacting Populations on Social Networks Preference: Poster

## Random Matrix Model for Socio-Physical Systems

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We will introduce a random matrix model imitating a repeated stochastic action inside the socio-physical systems, especially inside the pedestrian/vehicular traffic samples. We will demonstrate a possible way how to solve the steady state of such a system by means of Random Matrix Theory approaches. Except the macroscopical description of the steady state we will put more emphasis on statistical distributions of individual components, i.e. on a detailed structure of the system examined. The comparison between numerical realization of the matrix model mentioned and analytical predictions will be discussed in details.

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