



Contribution ID: 95

Type: not specified

## Simulation of transport traffic at urban crossroads using extended Petri nets

*Monday, 3 July 2017 17:00 (30 minutes)*

Our work is devoted to the construction and numerical study of low-level models of urban traffic based on extended Petri nets. We describe the basic principles for constructing such models. We propose an algorithm for automatic conversion of a given graph description of a road network into a Petri net taking into account the resolution of conflict situations (on the basis of traffic rules). As an example, we consider in detail the simulation of one of the most complex intersections in the Dubna town. The results of a numerical study of the throughput capacity of this intersection are presented, taking into account the different modes of traffic.

**Primary author:** Ms MARTYNOVA, Irina (student)

**Co-author:** Dr ERSHOV, Nikolay (Moscow State University)

**Presenter:** Ms MARTYNOVA, Irina (student)

**Session Classification:** Poster Session