



MARCH 6, 2014

# Future@SystemX

Modeling of Traffic flow within a Multi-modal Transportation Network

Magister: Multi-platform models

Kwami Seyram Sossoe

Scope: **New traffic models for roadway and railway networks**

- ◆ **Particle models for differentiate the type of vehicles on road network**
  - ◆ Bus
  - ◆ Electrical car-sharing
  - ◆ Demand responsive transport
  - ◆ Taxi, Private car, Truck, and Bike.
- ◆ **A layer model of flow for railway traffic (vehicles and passengers)**
  - ◆ Railway timetable traffic model (train, tram), and
  - ◆ Frequency traffic model (metro, tram).
- ◆ **A layer model of accessing terminals, stations and parkings.**

- ◆ Many models **already** developed and integrated in **the Magister Application** for traffic road networks



- ◆ Many models **already** developed and integrated in **the Magister Application** for traffic road networks
- ◆ A simulation model for accessing transport mode via terminals, stations, and parkings: **Ongoing**
- ◆ A Multi-class simulation model for coupling the different models (roadway and railway) that share (or not) the same physical structure of a transportation network: **Ongoing**

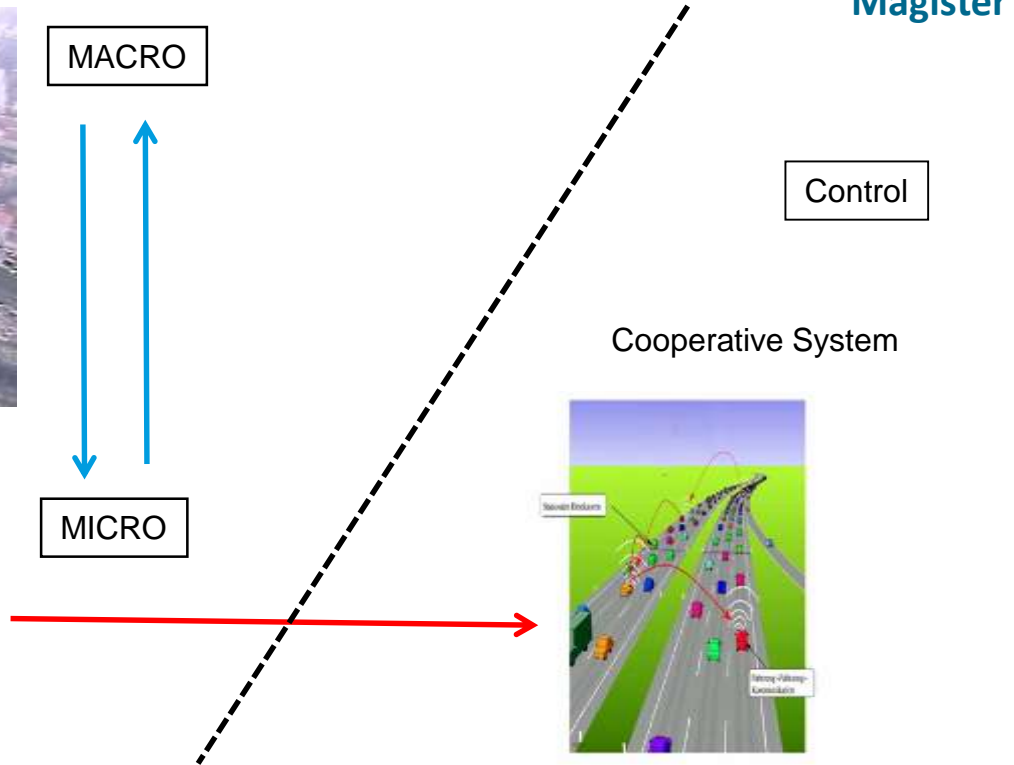


## Modeling



MACRO

MICRO



## On the way to Multimodality

**Magister**

Control

Cooperative System

