#### FRIDAY, 22 April

#### 13.20 - 14.40 Parallel Sessions

Public transport as public space (part 3) [Metro — La cave]

Convenors: PUTSPACE team

Chair: Tauri Tuvikene (Tallinn University)

## Ilya Sogolov, Technische Universität Berlin Center and Periphery in Paratransit in Bishkek

The SUMRICA project (Sustainable Urban Mobility in Central Asia) is aimed to create a paradigm shift in the thinking of young scholars and instructors and perhaps even stakeholders in CA. During the project, I have organized the research stay in Berlin of some 18 Central Asian or Iranian scholars and personally supported research from Bishkek. The aim of this contribution is to continue a dialogue on the clas between public transport and paratransit in Bishkek: Is shifting Marshrutki to the periphery of the city a step towards sustainable public transport? Currently, Bishkek increases its dependence on road private cars. This is much due to the informal mass suburbisation of the city and the degradation of municipal public transport. Given the budget constraints of the city, Marshrutki emerged as the dominant public transport. Expert teams like JICA suggested limiting Marshrutki to the periphery to avoid route doubling and congestion in the center. However, little effort has been committed to reducing private car congestion in the center. The introduction of priority lanes and parking fees can function as supportive measures fur such policies. In this discussion, I will evaluate the methods and proposal of SUMRICA gues researchers and observe various case studies to draw possible parallels to Bishkek.

## Erin Cooper, Universiteit Antwerpen Does MaaS address the challenges of multi-modal families? User perspectives from Brussels, Belgium

In recent years, Mobility as a Service (MaaS) has received considerable attention in transportation research and policy. The MaaS discourse emphasizes its user-oriented nature and flexibility, which, at least in theory, could fit well with the more complex mobility patterns of women. Practically, however, shared vehicles seem to be developed to address challenges of suburban commuters who travel alone by car to a central business district that is empty on evenings and weekends. This imagery reflects only a portion of the lifestyle in the Brussels region, a location where there are few 'business districts' that are completely uninhabited. The region is a pedestrian, cycling, and transit-oriented city and 68 percent of the trips within the region use these modes. In addition, 46 percent of households do not own a car and 36 percent of households have children. With this picture of Brussels in mind. we ask if shared vehicles and new technologies will be advantageous for the significant number of households with children or if new technologies will become a source of disadvantage. We use five key perspectives to analyze MaaS and compare this to the existing system and needs of multi-modal families: technology, transportation, economics, subject and policy. We show that the city has systematically made transportation improvements which address local needs, and a big shift to shared vehicles, either scooters or autonomous cars, are unlikely to address the existing transportation disadvantage in the city. There is a significant need to assess local environments and local needs in adopting new technologies.

# Todor Stojanovski, KTH Royal Institute of Technology Bim Kilje, Stockholm University Mixed (mobi)rea(lity) of standard to automated bus - Physical-virtual morphology of public mobility and Transit-Oriented Development (TOD)

The sustainable mobility paradigm emerges on the intersection of transport planning and urban design. It links to new mobilities research that highlights the urban experience of travel, mobilities and futures, in a broad synthesis. Public transport is a mobility culture of having a monthly card, understanding system maps and using travel apps, figuring out timetables and organizing social lives according to transit frequencies, remembering few important bus/tram/train lines, taking a book or mobile phone (to creates private space in the densest public spaces in city) and tolerating a "can of sardines" situations. Walking distances conventionally define service areas for public transport and urban growth boundaries for Transit-Oriented Development (TOD). Integration of buses with cities as mobility culture can be understood as urban experience and urban design of mobile and fixed public spaces. The public mobility as culture is compatible with mobilities of being online and virtually present. The mobile phone replaces the 19th century clock and pocketbook. In an intersection between urban design, anthropology and computational science, this paper will look or (mixed) physical mobility and virtu(re)ality of a whole (standard and automated) bus journey as perceptual morphology. Mixed reality seeks to better merge virtual objects and their interactions with the physical environment. The whole journey has travel time as constant. Yacob Zahavi is an economist who made the theory of travel time budgets. Cesare Marchetti calls them anthropological invariants in travel behavior of 1-2h travel time each day. There are 3 daily journeys (typically a person will make around 1000 journeys per year) and the maximum accepted travel time is between 1-2h or between 20-40min per journey. Perceptual morphology includes physical-virtual experience of public spaces while walking, waiting and being in vehicle.

Floridea di Ciommo, cambiaMO Thais Lamoza, door2door Martina Schuß, Technische Hochschule Ingolstadt Designing for gender safety in Shared Transport Mode