

Special session proposal

## Public transportation and big data: data processing and valuation

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In the past years, public transport operators and the transport authorities regulating them have collected huge quantity of data coming from their payment or operating systems. Moreover, today new data come from apps, social networks, mobile networks.... Using all this data to make transport planning remains a challenge, not only because of the amount of data, but also because of their space-time nature. In this session, we suggest to question the processing and analysis of this data, in order to better understand the users' behaviour, and to improve public transports services. The expected papers can handle with:

- Merging data coming from different kind of sources (completion methods and data allocation that permits to obtain enriched databases).
- Innovations in datamining methods.
- Predictive, learning and artificial intelligence methods (in order to predict ridership and explain its variability).
- Data validation works which compares data coming from different sources (in order to better understand and if possible correct the biases related to Big Data collection).
- The visualisation tools (to figure efficiently and usefully the great stream of data for the planners and operators).

Key words: Big Data, Smartcard, location and counting systems, datamining, data merging, data validation.

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