Analytical derivation of spectral rigidity for thermodynamical traffic gas

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Abstract

We introduce an one-dimensional thermodynamical particle model which is efficient in prediction about a microscopical structure of vehicular traffic streams. For such a model we show analytical calculations leading to formulae for time clearance distribution as well as for time spectral rigidity. Furthermore, the results obtained are reformulated in terms of traffic theory and consecutively compared to experimental traffic data.

References

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