

Optimization of Traffic Signals In Networks Considering Rerouting ⁴

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Abstract: In traffic signal control, determination of the green time and the cycle time for optimizing the total delays time is an important problem. We investigate the problem while considering the change of the associated flows at User Equilibrium resulting from the given signal timings (considering rerouting). It was formulated as a bi-level optimization model. In this work, we propose methods based on evolution algorithms and deterministic approach. The preliminary numerical results show that the presented methods are promising.

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