### **Accepted Manuscript**

An extended continuum traffic model with the consideration of the optimal velocity difference

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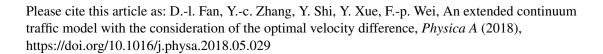
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#### **ACCEPTED MANUSCRIPT**

# An extended continuum traffic model with the consideration of the optimal velocity difference

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#### **Highlights**

- 1) An extended continuum traffic model is derived from the microscopic model with the consideration of the optimal velocity difference.
- 2) The stability condition of this extended continuum traffic model and some special traffic models is discussed, respectively.
- 3) The local clustering effect resulting in stop&go traffic is studied by the numerical test.

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