

Abstract Submitted
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Analysis of traffic flow models in phase space R.M. VELASCO,
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Department of Mathematics. Universidad Autónoma Metropolitana — Traffic flow
can be studied by means of hydrodynamic concepts, through an analogy with Navier-
Stokes compressible flow or with models coming from kinetic equations. In this work
we will consider two models for which the density and the average velocity are the
relevant variables. The Kerner-Konhäuser [1] is a phenomenological model proposed
in complete analogy with a viscous flow, whereas the so called kinetic model [2] comes
from the Pavari-Fontana kinetic equation [3]. Both models are seen from a moving
reference frame and a phase space is defined where all the analysis is done, some
orbits exemplify and contrast the behavior in these models [4]. [1] B.S. Kerner, P.
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