

# <sup>1</sup> AERODYNAMIC ATTRACT OF VEHICLES IN REAL TRAFFIC

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## **Abstract**

A vehicle, being defined structurally, contextually, shapely and dimensionally is used under real conditions and within its purpose, and as it is, it is in permanent interaction with the environment. The conclusion is logical that any vehicle, in its life time, has its functional and work capability and having allowed load and accepted work regime, it is adapted to be stable and driven to road conditions.

It is often happened that vehicles pass by closely or pass each other from different directions on the road. From such conditions and circumstances it is, in processes, initiated appearance of virtual Ventura's tubes and effect of vehicle aerodynamic side attracts. The produced forces speed and pressure fields influence further behavior of any vehicle disturbing its stability and driving.

In the paper this problem is underlined in order to contribute to theory and practice of aeromechanic being implemented in the field of vehicles.

**Key words:** aerodynamic, vehicle, attraction.

## **AERODINAMIČKO PRIVLAČENJE MOTORNIIH VOZILA U REALNOM SAOBRAĆAJU**

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**Rezime:** Motorno vozilo definisano strukturno, sadržajno, oblikovno i dimenziono, koristi se u realnim uslovima a u okviru svoje namene, i kao takvo je sa okruženjem u stalnoj interakciji. Logično se nameće zaključak, da motorno vozilo u eksploataciji poseduje funkcionalnu i radnu sposobnost i da se pod dozvoljenim opterećenjem, a u prihvatljivom režimu rada, stabilno i upravljivo prilagođava putnim uslovima.

Nije redak slučaj da se motorna vozila na putu pretiču ili mimoilaze, na veoma bliskom međusobnom rastojanju. Iz takvog stanja i okolnosti procesno se inicira pojava virtuelne Venturijeve cevi i efekta aerodinamičkog bočnog privlačenja motornih vozila. Nastale sile, polja brzina i pritiska, utiču na dalje ponašanje motornih vozila, narušavajući njihovu stabilnost i upravljivost.

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U radu se akceptira ova problematika u cilju doprinosa teoriji i praksi aeromehanike implementirane u oblasti motonih vozila.

**Ključne reči:** aerodinamika, motorno vozilo, privlačenje.