

# Robust Mid-range Communication in Urban VANETs

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**Abstract**—Cooperative driving and the associated need for vehicular communication motivate vehicular ad-hoc networks (VANETs). One major challenge is to provide for robust communication — in spite of highly dynamic topologies and the presence of shielding obstacles — without installing extra relay infrastructure. Traffic-density information and density estimation schemes are a valuable asset to approach this challenge. In this light we propose a novel routing protocol. Furthermore, extensive simulations are provided to support our case.

**(P19)Keyword**—Vehicular ad-hoc networks (VANETs); Robust communication; Routing protocols; Traffic awareness



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