

ACOUSTICS2008/2224 Tire/road noise reduction

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Traffic running on high speed roads is a considerable source of noise annoyance and is frequently a source of complaint by the general public. One of the components of this noise is generated by the interaction between motor vehicles tires and the road surface. The amplitude and frequency content of this noise is a function of many parameters, including the road surface texture, tire dimensions, tire materials and construction and the tread pattern design. The paper provides detailed insight concerning the factors influencing exterior (environmental) and interior (vehicle) tire/road noise reduction and includes recommendations with regard to optimize tire design.