



SCIENTIFIC SEMINAR

Monday 15 October - 14:30 – 15:15

Facoltà di Ingegneria – Sala del Consiglio
Via Eudossiana, 18

Behavioral and planning implications of connected and automated smart transportation systems

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and

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This presentation will be focused on the potential impact of connected and automated smart transportation systems (CASTS) on our activity-travel behavior, community and regional design/planning, built infrastructure development, transportation policies, and, at a more fundamental level, human activity-travel decision making. How may our activity participations and activity-travel patterns change, and how may city designs and land-use planning elements change to respond to changes in individual activity choices? Key questions remain on how autonomous vehicles in particular may affect travel.

Will autonomous vehicles lead to reduced parking needs, and reclamation of vast patches of urban areas that are currently invested in parking garages and other parking infrastructure? Will these vehicles expand people's willingness to be in a car through reduced stress and ability to do other tasks, thereby increasing commute-sheds and leading to sprawled cities? Will people continue to own personal cars, and start purchasing larger vehicles because they spend more time in autonomous vehicles? Or will a new ownership paradigm emerge in which people don't own cars, but rather buy transportation services by the mile from fleet companies? Will such a sharing economy lead to the use of smaller electric vehicles? Will there be more trips and more long trips?

The presentation will discuss many of these issues. While there is still a great deal of uncertainty regarding impacts, this presentation will identify key emerging considerations for infrastructure and community planning.



Dr. Chandra R. Bhat is a world-renowned expert in the area of transportation and urban policy design, with far reaching implications for public health, energy dependence, greenhouse gas emissions, and societal quality of life. Methodologically, he has been a pioneer in the formulation and use of statistical and econometric methods to analyze human choice behavior. His current research includes the social and environmental aspects of transportation, planning implications of connected and automated smart transportation systems (CASTS), and data science and predictive analytics. He is a recipient of many awards, including the 2017 Council of University Transportation Center (CUTC) Lifetime Achievement Award in Transportation Research and Education, the 2015 ASCE Frank Masters Award, and the 2013 German Humboldt Award.

He was recently listed as the top ten transportation thought leaders in academia by the Eno Foundation. He is also a top-cited transportation engineering researcher, and was listed in the most cited researchers in civil engineering by ShanghaiRanking's global ranking of academic subjects 2016 by Elsevier.

People interested in attending are kindly required to send an E-mail to:
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