Public Lecture on Traffic Management

The Department of Systems & Control Engineering is organizing a public talk by

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- Date: Monday 3rd December, 2018
- Time: 17.30 ~ 18.30
- Venue: MP 401, Maths & Physics Building, Msida Campus

Title & Abstract: Traffic Management for the 21st Century

Traffic congestion on urban road and motorway networks has a strong economic and social impact. A significant and growing interdisciplinary effort by the automotive industry, as well as by numerous research institutions, has been devoted in the last decades to planning, development, testing and deployment of a variety of Vehicle Automation and Communication Systems (VACS) that are expected to revolutionise the features and capabilities of individual vehicles within the next decades. If exploited appropriately, the emerging VACS may enable sensible novel traffic management actions aiming at mitigating traffic congestion and its detrimental implications. The presentation starts with a brief introduction to the rationale and impact of traffic management, along with an overview of expected changes in the years and decades to come. Existing, planned and emerging VACS, which have an impact on the traffic flow characteristics, are discussed and classified; and potential implications for future traffic management are presented. Related research needs and specific tasks and challenges are identified and commented. Some results from the ERC project TRAMAN21, referring to (microscopic and macroscopic) traffic flow modelling, traffic state estimation, system architecture, local and network-wide control tasks and approaches, are briefly outlined.

You are cordially invited to attend. Whilst entrance is free, kindly RSVP at sce.eng@um.edu.mt