



24th IEEE International Conference on Intelligent Transportation Systems (ITSC 2021)

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IEEE ITSC 2021 SPECIAL SESSION ON

“Revisiting the design of automated vehicles for enhancing motion comfort”

The automotive industry is facing one of the greatest challenges, to secure the acceptance of automated vehicles. Automated vehicles (AV) are expected to push towards the evolution of mobility environment in the near future, by decreasing traffic accidents, commuting time, vehicle fuel consumption and finally improving quality of life. However, there are still important challenges that may jeopardize the acceptance and uptake of this technology and must be overcome for AVs to become part of our daily life. One of the main benefits of AVs is the ability of consumers to use their commuting time more productively, which is considered one of the key reasons for using an AV. However, all the envisaged designs and use cases of AVs, SAE Level 4 and 5, are expected to lead to an increased incidence of carsickness. Despite vehicle dynamics factors playing an important role on carsickness likelihood, there is currently no extensive literature on the subject, and only few practical solutions can be found in the literature. Thus, this special session organized by colleagues from academia and industry will re-focus the attention of researchers and automotive engineers on motion comfort-oriented studies to tackle this issue. The special session will consider papers studying basic theoretical advances; applications, case studies; new methodologies and procedures; and empirical studies. Among others, the session will focus on assessment methods of motion comfort, case studies of evaluation, vehicle-oriented modifications that can enhance it, and human factors-oriented modifications that are able to minimize its incidence.

Instructions for authors:

The full paper submission deadline is **on 31st March**. During your submission, you will be requested to fill the session code (124ub) and the session related keywords (Human Factors in Intelligent Transportation Systems; Automated Vehicle Operation, Motion Planning, Navigation; Driver Assistance Systems). For the initial submission, a manuscript in US Letter format can be of 6-8 pages (including references), but for the final submission, a manuscript should be of 6 pages (including references) with 2 additional pages allowed but at an extra charge.

If you have any questions, please check the conference website (the session details will be soon uploaded), or contact any of the session organizers. We thank you for your contribution and look forward to seeing you at IEEE ITSC 2021!

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