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## DC SMART GRIDS FOR NEXT GENERATION TRANSPORTATION SYSTEMS (NETS)

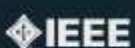
### ORGANIZED BY

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The transition to next-generation transportation systems is redefining energy infrastructure requirements, with an increasing focus on sustainability, efficiency, and seamless integration. This special session, titled "DC Smart Grids for Next Generation Transportation Systems," emphasizes the pivotal role of Direct Current (DC) smart grids in enabling advancements in modern mobility. The session will delve into innovative solutions for powering electric vehicles and managing electrified public transit systems. Moreover, the outcomes of the NeTS project, funded by the Ministero dell'Università e della Ricerca within the PRIN 2022 program, will be presented.

Key topics include the digital twin implementation of urban traction electrification systems, strategies to exploit the urban DC grids, dynamic vehicle-to-grid (V2G) integration, high-efficiency DC charging networks, and the interplay between transportation electrification and renewable energy sources.

By highlighting the synergies between DC smart grids and the evolving transportation landscape, this session seeks to chart a path toward a cleaner, smarter, and more resilient future in mobility.



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