TIME DELAY SYSTEMS Webings



2022

Synchronization, Networks, Time-delays and more



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Professor

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Apr. 1, 2022, Friday @ 4:00 pm (CET)

7:00 am (PDT), 10:00 am (EDT), 10:00 pm (CST)

Event will take place via Zoom

ABSTRACT: The talk will review work on network synchronization, i.e. the phenomenon of common time-behavior in coupled systems. Aspects that come into play are: coupling between the separate systems, effect of time-delays in the coupling, synchronization and scaling of the network. In the talk focus will be given to experimental results (automotive, electronic brain, clocks) and how results can be developed without going in-depth in the underlying theory.

BIO: Henk Nijmeijer (1955) is a full professor in Dynamics and Control at the Department of Mechanical Engineering of the Eindhoven University of Technology. His research field encompasses nonlinear dynamics and control and applications thereof. He is Field Chief Editor of Frontiers in Control Engineering. He is a fellow of the IEEE since 2000 and was awarded in 1990 the IEE Heaviside premium. He is appointed honorary knight of the 'Golden Feedback Loop' (NTNU, Trondheim) in 2011. Since January 2015 he is scientific director of the Dutch Institute of Systems and Control (DISC). He is recipient of the 2015 IEEE Control Systems Technology Award and a member of the Mexican Academy of Sciences. He has been Graduate Program director of the TU/e Automotive Systems program in the period 2016-2021. He is an IFAC Fellow since 2019 and as of January 2021 an IEEE Life Fellow.

