

# Controllability criteria for 1D hyperbolic systems

*Wednesday, October 18, 2023 9:00 AM (1 hour)*

This talk deals with the controllability of linear 1D hyperbolic systems. Reformulating the problem in terms of linear difference equations and based on infinite-dimensional realization theory, we obtain both necessary and sufficient conditions for the approximate and exact controllability, expressed in the frequency domain as well as an upper bound for the controllability times. The results are applied to dynamic network systems. This is a joint work with S. Fueyo, G. Mazanti and M. Sigalotti.

**Presenter:** CHITOUR, Yacine (L2S)