



Hamilton Institute

Separation Principles and Controller Realization
for Linear Switching and LPV System

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Abstract:

The stabilization problem for linear switching and time-varying-parameters systems (LPV) will be investigated. Necessary and sufficient stabilization conditions will be given, based on a separation principle.

An extension of the well known Youla-Kucera parametrization of all the stabilizing compensators for linear time invariant systems will be proposed for LPV and switching systems.

Some intriguing aspects such as the paradox of the zero transfer functions and several applications of the proposed techniques will be presented. The limitations of the results will be discussed.

Venue: Seminar Room, Hamilton Institute, Rye Hall,
NUI Maynooth

Time: 4.00pm - 5.00pm (followed by tea/coffee)

Travel directions are available at www.hamilton.ie