

Weak Structure at Infinity and Row-by-row Decoupling for Linear Delay Systems

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Abstract: We consider the row-by-row decoupling problem for linear delay systems and show some close connections between the design of a decoupling controller and some particular structures of delay systems, namely the so-called weak structure at infinity. The realization by static state feedback of decoupling precompensators is studied, in particular, generalized state feedback laws which may incorporate derivatives of the delayed new reference.

Keywords: structure at infinity; row-by-row decoupling; delay systems;

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