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Regularization and stabilization of port-Hamiltonian descriptor systems via output feedback

Tuesday, August 13, 2024 4:30 PM (30 minutes)

Regularization and index reduction for singular linear port-Hamilonian descriptor systems via output feedback is discussed. When the system is regularized and has index at most one, then the system is stable and passive, but not necessarily asymptotically stable and strictly passive. It is then shown how output feedback can be used to make the system (robustly) asymptotically stable and strictly passive.

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