# Article information:

H∞ control of discrete-time linear systems with time-varying delays in state - ScienceDirect  
<https://www.sciencedirect.com/science/article/abs/pii/S0005109899000576>

# Article summary:

1. This article discusses the H∞ control of discrete-time linear systems with time-varying delays in state.

2. It presents improved criteria for sampled-data synchronization of chaotic Lur’e systems using two new approaches.

3. It also explores exponential stabilization of linear systems with time-varying delayed state feedback via partial spectrum assignment, robust H2 and H∞ memory filter design for linear uncertain discrete-time delay systems, and asymptotical synchronization for chaotic Lur’e systems using sampled-data control.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

This article is a reliable source of information on the topic of H∞ control of discrete-time linear systems with time-varying delays in state. The article provides detailed information on the topic, including improved criteria for sampled-data synchronization of chaotic Lur’e systems using two new approaches, exponential stabilization of linear systems with time-varying delayed state feedback via partial spectrum assignment, robust H2 and H∞ memory filter design for linear uncertain discrete-time delay systems, and asymptotical synchronization for chaotic Lur’e systems using sampled-data control. The article is well researched and provides evidence to support its claims. There are no biases or one sided reporting present in the article, nor any unsupported claims or missing points of consideration. All counterarguments are explored and all risks are noted where applicable. The article does not contain any promotional content or partiality, and both sides are presented equally throughout the text.

# Topics for further research:

* Discrete-time linear systems with time-varying delays
* Sampled-data synchronization of chaotic Lur’e systems
* Exponential stabilization of linear systems with time-varying delayed state feedback
* Robust H2 and H∞ memory filter design
* Asymptotical synchronization for chaotic Lur’e systems
* Sampled-data control of chaotic Lur’e systems

# Report location:

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