



-Projective synchronization for coupled partially linear complex variable systems with known parameters

GamalM.Mahmoud, Emad E.Mahmoud, and Ayman A. Arafa

Abstract:

The passivity theory is used to achieve projective synchronization in coupled partially linear complex-variable systems with known parameters. By using this theory, the control law is thus adopted to make state vectors asymptotically synchronized up to a desired scaling factor. This paper deals with sending different large messages which include image and voice signals. The theoretical foundation of the projective synchronization based on the passivity theory is exploited for application to secure communications. The numerical simulations of secure communication are used to send large message, an image and sound (voice) signal. The errors are controlled to zero that show the agreement between theoretical and numerical simulations results.

Keywords:

projective synchronization; passive theory; complex; secure communications

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