

An Ideal Assortative Network and Synchronization

DONG Cheng-Dong¹ and LIU Zeng-Rong²

¹ Department of Applied Mathematics, Shanghai University of Finance and Economics, Shanghai 200433, China

² Institute of Systems Biology, Shanghai University, Shanghai 200444, China
(Received: 2006-2-13; Revised:)

Abstract: This paper proposes a novel complex network with assortative property based on multi-center networks. The average path length and clustering coefficient of the network are calculated, and the impact on the network topology is investigated. A simple dynamic system established on the proposed network is used to analyze how the assortative property of the network affects synchronization.

PACS: 89.75.Hc

Key words: complex network, assortative property, average path length, clustering coefficient, synchronization

[\[Full text: PDF\]](#)

Close