

Abstract Submitted  
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**Empirical study on competition in audience rating of China Central Television programs**<sup>1</sup> LINGLING WU, YUE-PING ZHOU, HUI CHANG, DA-REN HE, Yangzhou University — In recent years, the competition in audience rating of China Central Television (CCTV) Programs becomes increasingly more vehement. Each program is trying its best to figure the new view to the masses. We have performed an empirical investigation on the competition situation by using a complex network description. In the network nodes are defined as television programs. Two nodes are connected by an edge when they are positioned in a common time period. The edge represents the competition and cooperation relationship between the programs. They are competing because each of them tries to get more audience rating; they are cooperating since each of them obtains some audience rating, or say, gets “a piece of cake.” Some empirical statistical rules have been obtained, such as an exponential degree distribution, the average path length 1.52, the  $C(k) \sim k^{-1}$  scaling rule between the clustering coefficient and the degree, and the approximate zero assortativity. These observations may be helpful for the arrangement of the television programs.

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