## Abstract Submitted for the MAR08 Meeting of The American Physical Society

IT product competition Network<sup>1</sup> XIU-LIAN XU, LEI ZHOU, JIAN-JUN SHI, YONG-LI WANG, AI-XIA FENG, DA-REN HE, Yangzhou university — Along with the technical development, the IT product competition becomes increasingly fierce in recent years. The factories, which produce the same IT product, have to improve continuously their own product quality for taking a large piece of cake in the product sale market. We suggest using a complex network description for the IT product competition. In the network the factories are defined as nodes, and two nodes are connected by a link if they produce a common IT product. The edge represents the sale competition relationship. 2121 factories and 265 products have been investigated. Some statistical properties, such as the degree distribution, node strength distribution, assortativity, and node degree correlation have been empirically obtained.

<sup>1</sup>supported by Chinese National Natural Science Foundation, No. 10635040 and 70671089

Da-Ren He Yangzhou University

Date submitted: 24 Nov 2007 Electronic form version 1.4