

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Beijing restaurant network¹ CHUN-HUA FU, PEI-FANG ZHNAG, YONG-LI WANG, JIAN-JUN SHI, AI-XIA FENG, DA-REN HE, Yangzhou University — We have empirically studied the restaurants in Beijing and suggested a network description on the system. We define the restaurants as nodes and connect a link between two nodes if the two restaurants sell a common dish. The edge represents the sale competition relationship. In order to describe the competition, we define a node weight, which is the mark given by consumers on an evaluation network (<http://www.dianping.com>), to the restaurant in cooking the dish. 3338 nodes and 688 dishes have been investigated. We find that both the total node weight, which is defined as the sum of the node weight in all the dishes, and the so-called dish weight, which is defined as the sum of the node weight in one dish, show a rather nice power law distribution.

¹supported 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