

ISAHP 1999, Kobe, Japan, August 12-14, 1999

THE THEORY AND ALGORITHMS OF CYCLE SYSTEMS IN ANP

Wang Lianfen

Dept. of Information , Renmin University of China Sun Hongcai

Sun Hongcai

Beijing Institute of Decision Science and Management

N-24 Tai pin Road, Beijing 100850, P.R.China

E-mail: hcs@cenpok.net

Abstract

In this paper, we will discuss the theory and algorithms for cycle systems, including the inner dependent and inner independent cycle systems in ANP. The structure and eigenvalues of system's supermatrix will be analysed and the algorithm named, power method with original shift, an efficient method for solving the maximum eigenvalue, will be used to get the final priority weights of elements in system

Keywords cycle systems power method with original shift