

**Meeting:** 1001, Evanston, Illinois, SS 12A, Special Session on Iterated Function Systems and Analysis on Fractals

1001-37-11            **Stephen S.T. Yau\*** (yau@uic.edu), Dept. of Math. Stat. & Computer Sci., University of Illinois at Chicago, Chicago, IL 60607, and **Ning Jin.** *General finite type IFS and M-matrix.* Preliminary report.

In 2001, Ngai and Wang introduced the concept of finite type IFS to study the Hausdorff dimension of self-similar sets without open set condition. In this talk, by applying the M-matrix theory developed in our previous works, we generalize the notion of finite type IFS to the general finite type IFS.

A family of IFS with 3 parameters but without open set condition is presented. The Hausdorff dimension of the associated attractors can be calculated by both the M-matrix method and the general finite type IFS method. But these IFS are not finite type except for those parameters lying in a set of measure zero. (Received May 06, 2004)