

1112-37-513

Wenbo Sun* (math@math.northwestern.edu), 2033 Sheridan Road, Mathematics Department, Evanston, IL 60208. *Face transformations on dynamical cubes and its applications.*

The dynamical cube is a topological structure developed recently in the study of the structure theorem on topological dynamical systems. This structure has various applications including characterizing topological systems, computing automorphism groups, and even the convergence problem for multiple averages. In this talk, I will introduce the recent development of this subject and some of its applications. This is joint work with Sebastian Donoso. (Received August 10, 2015)