

1106-VI-1898 **Mahshid Atapour*** (atapour@math.usaskca), Saskatoon, SK S7N5A7, Canada, and **Neal Madras**. *Ratio limit theorem and shape results for pattern-avoiding permutations.*

A permutation p of $12\dots N$ is said to contain a pattern (relatively shorter permutation) q of length k if p contains a substring of length k that has the same relative order as q . Let $SN(q)$ denote the set of permutations of length N which avoid the pattern q . In this talk, I will present a brief sketch of the proof of a ratio limit theorem for the number of q -avoiding permutations when q belongs to some specific classes. Considering a permutation of length N as a set of N points in the xy -plane, I will also discuss some results about the typical shape of some q -avoiding permutations in the xy -plane. This is a joint work with Neal Madras. (Received September 15, 2014)