

1135-05-2537 **Michael Kural*** (mkural@mit.edu). *Fuss-Schröder Paths and Rooted Plane Forests.*

We describe a bijection between (k, k) -Fuss-Schröder paths of type λ and certain rooted plane forests with $n(k + 1) + 2$ vertices. This yields a recursion which allows us to analytically enumerate the number of large (k, r) -Fuss-Schröder paths of type λ , solving an open question posed by An, Jung, and Kim. Furthermore, we generalize the concept of (k, r) -Fuss-Schröder paths to (k, S) -Fuss-Schröder paths, in which r can take any value in a given set S , and enumerate these paths as well. (Received September 26, 2017)