

1056-05-428

Kendra Killpatrick* (Kendra.Killpatrick@pepperdine.edu), Natural Science Division, 24255 Pacific Coast Hwy, Malibu, CA 90263-4321. *Symmetry and Log-Concavity Results for the Fibmaj Statistic*. Preliminary report.

Fibonacci tableaux were first defined by Richard Stanley in 1975. Since then, much work has been done on Fibonacci tableaux that parallels results known for the well studied Young tableaux. In particular, a major index statistic called the Fibmaj statistic can be defined on Fibonacci tableaux that is analogous to the major index that can be defined for Young tableaux. In my talk, I will give the definition of the Fibmaj statistic for Fibonacci tableaux and show that this statistic is both symmetric and log-concave over all Fibonacci tableaux of a given shape μ . In addition, I will translate the Fibmaj statistic on Fibonacci tableaux to a statistic on Fibonacci permutations and share several conjectures about this statistic. (Received September 06, 2009)