1107-05-490 **Scott Garrabrant*** (coscott@math.ucla.edu) and **Igor Pak** (pak@math.ucla.edu). *Recent progress on the Noonan-Zeilberger Conjecture.*

Let $R = \{\pi_1, \ldots, \pi_k\}$ be a list of patterns, and let $m_1, \ldots, m_k$ be a list of nonnegative integers. Denote by $A_n(R; m_1, \ldots, m_k)$ the number of permutations $\sigma \in S_n$ such that σ contains π_i exactly m_i times, for all $1 \leq i \leq k$. The Noonan-Zeilberger Conjecture states that $A_n = A_n(R; m_1, \ldots, m_k)$ is always a polynomial-recursive sequence of n, meaning that it satisfies a nontrivial recurrence relation of the form $p_0(n)A_n = p_1(n)A_{n-1} + \ldots + p_m(n)A_{n-m}$, where each p_i is a polynomial. We present some recent progress on this conjecture. (Received January 20, 2015)