Christian Ballot<br>Divisibility of the Middle Lucasnomial Coefficient, Fibonacci Quart. 55 (2017), no. 4, 297-308.


#### Abstract

Pomerance established several theorems about the number of integers $n$ for which $n+k$ divides the binomial coefficient $\binom{2 n}{n}, k$ a given integer. We conduct a similar inquiry about the number of integers $n$ for which $U_{n+k}$ divides $\binom{2 n}{n}_{U}$, where $U$ is a fundamental Lucas sequence and $\binom{2 n}{n}$ U the corresponding middle Lucasnomial coefficient. In a final digression, we argue that central Fibonomials prime to 105 should be about as rare as middle binomial coefficients prime to 105 , and we compute the first few examples.


