Some New Occurrences of the Central Delannoy Numbers Timothy Myers, Howard University

The sequence of central Delannoy numbers counts the number of paths in a rectangular lattice from (0,0) to (n,n), wherein each such path consists of single steps to the east, north, and northeast. This sequence counts many other objects in addition to these central Delannoy paths, such as special trees, walks, and matrices.

In this talk we will discuss some less familiar and some new occurrences of these numbers; which will include Clifford graph algebras and a special class of polynomials in the ring $\mathbb{Z}_2[x]$.

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