

1025-57-279

Roger Vogeler* (vogeler.2@osu.edu). *Evil twins of n-dimensional checkerboards*. Preliminary report.

Let $C(n)$, the n -dimensional checkerboard, be the 2-skeleton of the standard tiling of Euclidean n -space by n -dimensional cubes. For n at least 3 there exists an evil twin of $C(n)$, that is, a simply-connected Platonic square complex having the same local structure as $C(n)$ but not isomorphic to $C(n)$. This case of $n=3$ is particularly interesting. We will describe this family of complexes. (Received January 24, 2007)