About Fibonacci Tilings

Benevolent Tomato

Conjecture 1. *Consider a cube of dimension of* 2*-by-*2*-by-n. Let* C_n *The number of ways to perfectly tile this cube with* 2*-by-*2*-by-*1 *cubes. Assuming no rotational similairity, the seqeunce* C_n *is determined entirely by the following recurrence relation.*

$$C_1 = 2, C_2 = 9 \tag{0.1}$$

$$C_n = 2C_{n-1} + 5C_{n-2} \tag{0.2}$$