1116-K6-1827   **Douglas G. Burkholder*** (`burkholderd@lr.edu`), 625 7th Ave NE, Hickory, NC 28601. *Quilts & Lace: Unexpected Beauty Hidden in Radin-Conway's Pinwheel Tiling.*

In 1994, John Conway and Charles Radin created a non-periodic Pinwheel Tiling of the plane using only 1 by 2 right triangles. By selectively painting either every fifth triangle or two out of every five triangles, based only upon their location in the next larger triangle, we discover 15 unexpected, distinctive, non-periodic patterns each with their own beauty. These patterns can be combined into artwork which mimics quilts and lace by selecting different rules for different places within the tiling. (Received September 21, 2015)