

Greg Brockman and Ryan J. Zerr
Asymptotic behavior of certain Ducci sequences,
Fibonacci Quart. **45** (2007), no. 2, 155–163.

Abstract

The Ducci map applied to vectors in \mathbb{R}^3 is considered. It is shown that for any starting vector, the corresponding sequence of iterates either eventually becomes periodic or, if not eventually periodic, asymptotically approaches the zero vector. A precise characterization of which vectors exhibit each of these separate behaviors is given.