

1064-17-155

Geoffrey M Dixon* (gdixon@7stones.com), 103 Dover Rd, Durham, NH 03824. *Integral Octonions, Octonion XY-Product, and the Leech Lattice.*

The integral octonions arise from the octonion XY-product. A parallel is shown to exist with the quaternion Z-product. Connections to the laminated lattices, Λ_4 , Λ_8 , Λ_{16} and Λ_{24} (Leech), are developed. (Received September 06, 2010)